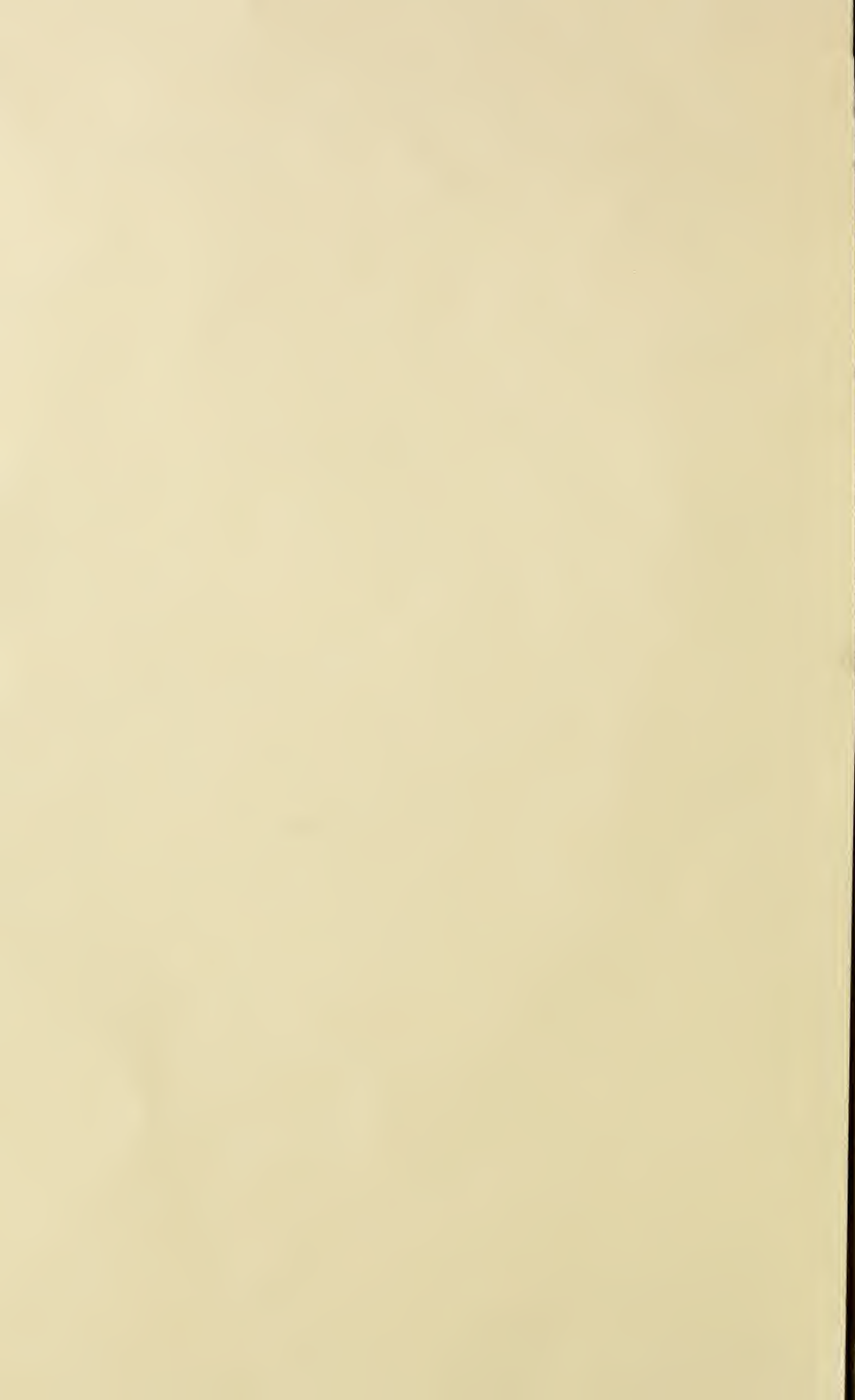


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THE MARYLAND FARMER:

DEVOTED TO

Agriculture, Horticulture, and Rural Economy.

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No. 10.

THE CULTIVATION OF WHEAT.

We propose to offer a few plain observations and suggestions upon the culture of wheat, one of the chief staple crops of the civilized world.

In the United States alone, nearly three hundred million of bushels of wheat is produced annually, being over seven bushels for each man, woman and child in the country. The same area devoted to wheat should be made to produce twice the amount. England has, by improved culture, brought up the average per acre from fourteen to twenty-eight bushels within a few years. This can be accomplished as easily in America—and then we might be called the granary of the world, which is said now—but we in truth do not grow at present much more than we consume, and not as much as we would require, were it not for the immense use made of Indian corn as bread, and in other forms as a substitute for wheat, especially in the South and Southwest. Mr. Harris, of the *Agriculturist*, in his "Walks and Talks," says, "There is little danger of our over production of wheat as the population increase, and the increasing consumption will keep full pace with the increased product."

The question is, how shall each individual increase his wheat crop? In the first place, we have a favorable locality in the Middle States and naturally a favorable soil, neither too stiff nor too sandy, for the production of the largest quantity of wheat per acre.

To attain this desirable point, we recommend either a heavy crop of clover, plowed under deep when it is in blossom, and when rotted, cross plowed and kept light by frequent harrowing until seeding time; or sow the wheat after a crop of tobacco which was highly fertilized, and when the crop was early enough to be out of the way in time to prepare the land for sowing the wheat by the 15th of October. Or, as Mr. Allen declares to be an excellent plan, pasture or mow the first crop of clover; and when the second crop is

ripening its seed in July or 1st of August, turn under, and keep the land mellow and clean by frequent tillage with the harrow until time to sow the grain. "By this mode, you are improving the land, perpetuating your clover crop without re-seeding, and increasing the chances of good wheat crops." As to *summer-fallow*, which he deems the very best and surest plan to secure a big crop, we dissent, because it requires too much labor and loss of pasture. It may do in countries where labor is cheap and stock are soiled, but not here. By *summer-fallow*, is meant plowing in spring, sowing in peas, buckwheat or rye, to be plowed under before any seed is formed, and then continued clean cultivation until the wheat is put in. We certainly oppose, as a general rule, rotating corn with wheat; it seldom pays. The corn crop is a very poor preparatory one for wheat.

SEEDING.

No matter which of the above preparations of ground may be resorted to, let the land be in nice order; and at the last harrowing, sow some sort of phosphatic fertilizer, rich in nitrogen or ammonia. Be not niggardly in the use of it, though in this there may be useless excess. Three hundred to four hundred pounds well ammoniated is enough. What we desire to say, just here is, that if a man has only money to spare for the purchase of a ton of fertilizer, he had better put it all on three acres than on six. The ground prepared and fertilized, sow the wheat, with the shovel plow to cover it, if it be not possible to get a drill—but by all means use a drill—"The Farmer's Favorite" is considered the best; and if used, the fertilizers can be sown at same operation, which saves the hand sowing where the wheat has to be broad-casted. It does not do to cover wheat with the harrow, it should be plowed in lightly or drilled. The drill system is undeniably far the best.

From three to five pecks of good seed is enough for an acre; the first quantity for land, prepared as we have recommended, and sown from the 15th

to 30th of September, and the latter quantity if sown on similar ground after the 1st of October. On corn ground, or badly prepared land, six or eight pecks would not be too much as so much seed is lost, never comes up, or if it does, it perishes in winter.

TIME OF SOWING.

We think the best time is from the 20th of September to the 10th of October. We like early sowing, unless the fly is very prevalent in the neighborhood. We dread the smut and rust which usually accompany late sown wheat more than we do the fly. The loss by the first is irreparable; but if the fly destroys our wheat, we have a chance to put the land so expensively prepared in some other crop the same year, and get back our outlay.

SEED WHEAT.

Select the best, and pass it through the revolving screen, to get rid of all small and imperfect grains and weed seeds, then soak or steep it in strong brine, (chamber lye is best) for a few hours, drain it, spread thin on the barn floor, and dry it by rolling it with well slaked lime or plaster, and sow soon after. Some prefer a steep or pickle of weak ley and copperas, or lime-water. When in the pickle, stir it often and skim off all the grain and impurities that rise on the top. The same pickle will answer by replenishing as it gives out. All varieties of wheat do not suit all soils or all localities; those sorts that at present seem to be most popular as the hardiest and most prolific sorts are the Fultz, Tappahannock, Smooth Amber, French, White Chaff Mediterranean, Lancaster County White and the old Blue Stem White, where it is found pure. The great aim in selecting seed wheat, should be to get that which unites most of these characteristics, to wit: Purity of sort, clean of all cockle, chess, etc., early ripening, an abundant yield, hardness in winter, regularity of growth, thin skin, a close chaff, stiff and short straw.

HARVEST AND MARKET.

As soon as the grain leaves the "milk" and enters on the "dough" state, cut it as quickly as it can be done; put up in secure shocks, or haul at once to the barn. Thresh as soon as possible and send to market, as a general rule; but if prices rule low, or other causes intervene, get it in the granary, nicely cleaned, for until then every moment it is wasting in some way or other from the time it is cut until it is in the bin, and there even it has its enemies and its risks. It is never safe until its converted into coin? well, into currency, or has paid a debt,

As we said in the beginning of this article, England has of late years doubled her wheat product per acre, and it was done by high manuring, by heavy grazing with cattle and sheep, and with the use of fertilizers, the three animal, vegetable and mineral combined, being important to obtain the highest degree of fertility in the soil. It is said that by the application of three hundred pounds of superphosphate of lime, and two hundred and seventy-five pounds of nitrate of soda, either mixed or sown separately per acre, annually, the product was an average for twenty successive years of forty-eight bushels of barley. The same result was obtained by using fourteen tons, (equivalent to about thirty four-horse wagon loads of farm-yard manure.) The chief elements required for wheat, it would seem, are phosphate of lime, nitrogen and potash, the latter is said to be generally found in sufficient quantities for wheat in most soils.

A large quantity of fresh stable or barn-yard manure is not good for wheat, it will go to straw and not make grain. A clover ley, which had been rank but closely grazed down, furnishing a clean turf to be plowed under, and heavy manuring with phosphates, will likely prove the best guarantee for a large yield of grain. Whatever fertilizer be selected, see that a liberal dose be given, homeopathic doses will not fill the granary or stuff the pocket.

We would say, in conclusion to our farmers, sow the best and cleanest seed you can get; use freely ammoniated or nitrogenized phosphates; try different kinds of both wheat and fertilizers, side by side, and you will be able to see which fertilizer and which sort of wheat suits your soil the best, and stick to it. Bones, next to lime, is the great *sine qua non* for the improvement of lands in this region, particularly in Southern Maryland. Whether fertilizers be used or not, we would recommend strongly the application to each acre of three or four bushels of salt, mixed with two bushels of plaster. Many of our highly intelligent farmers have used salt and plaster with marked effect on their crops and grass. The efficacy of Plaster is too well established by long experience to be doubted; yet, strange to say, our farmers seem of late years to have to a great extent abandoned its use. This should not be; it is always wrong to give up an old friend for new ones, however captivating they may be. It is their costliness that attracts, while the cheap, plain and simple—yet useful and valuable—is cast aside for the more startling and expensive. Our best planters and farmers still use it extensively in various ways.

In connexion with this subject, we beg pardon for again saying what we have often said in one form and another; that, at the present time, it is a wise policy to manure and fertilize to a high degree our lands, that one acre may be made to produce thrice as much as formerly, because that is about the difference in the cost of production, owing to the scarcity of labor; and that labor, being now three times as high, considering its utter worthlessness compared with the slave labor of former times. We utter no paradox, when we assert that, to farm most economically and attain the minimum cost of production, high manuring and the best labor-saving machinery must be resorted to.

EXPERIMENTS IN SEEDING WHEAT.

A West Virginia correspondent of the *Journal of the Farm*, sends to that journal the results of an experiment in growing wheat in that section of the country, which, especially as it relates to thick and thin sowing, will be of value to our readers:

In the Fall of 1871, we sowed an eighth of an acre in wheat for experimental purposes. The variety was the Fultz, and the first sample we had seen of that variety; quantity of seed used, one gallon, or at the rate of one bushel to the acre. This was thin seeding with us, the minimum quantity sown being one-and-a-half bushels per acre.

The ground was an old meadow, cultivated one year in corn. The corn was taken off, and the ground twice harrowed and top-dressed with two loads of stable manure, and the seed put in with a double plow, early in October. It did not make much of a growth in the fall, nor did it start very vigorously in the spring. With a tolerably favorable season it "tillered out" pretty well, and at harvest was not much thinner than where the usual quantity had been sown. The yield quite surprised us, being one hundred and eighty pounds of wheat, and two hundred and twenty-four pounds of straw, equal to an average of twenty-four bushels per acre, while the wheat seeded one-half thicker, on similar soil, yielded fifteen bushels per acre, a gain of nine bushels per acre in the yield, and half a bushel of seed saved besides. The yield of straw was not quite so heavy as where it had been more thickly seeded, being less than a ton per acre.

I think that the success or failure of thin seeding will depend very much upon the season, during the months of April and May, following the sowing. If the weather is unfavorable during that period, it will not tiller freely enough to make a fair stand, and, of course, if the number of stalks upon the ground is very small, the chances for a large yield are correspondingly reduced. By thin seeding, I mean a bushel of wheat, or less than a bushel, to the acre.

Agricultural Calendar.

FARM WORK FOR OCTOBER.

October has come with his many blessings and his many calls upon the husbandman for assiduous, yet agreeable, labor. In England, this is the prime month for making "Old October Ale," and in wine countries for the finest wines that vineyards produce, while in this country, cider making and whiskey distilling is pressed with all the energy that particularly distinguishes "young America." It is a very important month in many respects to all classes of farmers, whether purely farmers, planters, orchardists, or engaged in other branches of agriculture as a specialty, or even with those who diversify their products.

TOBACCO.

The tobacco crop must be housed this month, or Jack Frost will secure it for himself. As early as possible, this crop must be put in the house; and if money is expected from it, great care must be observed in the handling, curing and after management of it. It is idle to expect high prices for frost-bitten, weather-beaten, worm-eaten, badly cured, half-assorted, bad-smelling tobacco. The reverse of all this brings revenue to the poor planter, in despite even of the cruel taxes imposed on it in this country and in Europe. Planters should struggle to do their best to manage the *little* tobacco they have made this year, in the best possible manner; and if their labors are not correspondingly rewarded, see that their representatives in the public councils of the nation, do their duty to them in repealing the laws that are so oppressive and offensively discriminating in their effects upon the tobacco interest—the largest, except the cotton interest, known to American industry.

CORN.

Corn, if not already cut off, should at once, or the fodder will be lost. The first frost and high wind will strip the blades and bear them away like the leaves of the trees. Shuck such as is dry, and put in the corn-house small quantities at a time.

POTATOES.

The latter part of this month, in the Middle States, Irish potatoes ought to be gathered unless the tops are very green, when they should be left to the ripening process of this and the next month. Gathered now, they should be exposed in small piles or heaps for a few days in the field if the weather be dry; if not, spread over a barn floor for a week or ten days, where they can be dried

without much sunlight which turns them green, and gives to them a bitter taste, instead of the sweetness properly belonging to a well preserved potatoe. Then, after a proper drying, that is, when they are dug wet or caught in a rain, they should be stored in cellars or stoops of fifty to one hundred bushels. The latter, we think, much the better plan in our section of country, than putting them in bulks of one or more thousand bushels in a cellar. The stoops are simply an opening like the beginning of a ditch or a well, either four or five feet in diameter if it is intended to be put up in conical form, or four or five feet wide if in ditch shape, and as long as is necessary or desired, according to the size of the pile of potatoes and the way the land lies for drainage. Select good dry spots in the potatoe ground for this purpose, on parts of the ground which are not likely to hold water, but rather so placed as to carry off easily any water that may fall into the small conduits or drains you place around, and from the heaps you have stored. The wells or trenches should not be over a foot deep—the bottom dry. Put in the potatoes at least two or more feet in a well packed conical shape, cover with dry straw one foot thick, then dirt four inches, and well patted with spades and hoes, as the graves are rounded off by the grave-digger. As cold weather sets in, add three inches more of earth, and before severe cold begins, cover with corn-stalks or straw, or fine pine or cedar brush will do if put on in sufficient thickness. The potatoe, unlike the apple, must never freeze if intended afterward for market; nor is it hardly fit for home use if once frozen, however thawed, or however soon afterward they may be used.

HOGS.

The hogs should have corn or mush made of bran and meal allowed them twice a day, and, about the last of the month, such as are intended for the shambles, ought to be penned in clean floored pens, so arranged as to have a sleeping and eating apartment, with a pen attached where they can have coarse material for converting into compost with their own deposits. Keep the pens clean, allow them good beds of leaves or dry straw, plenty of clean water; rotten wood or charcoal once a week, also a little salt and sulphur frequently, and vary their food, such as corn on the cob, corn mush, cooked vegetables with bran and meal, swill with boiled rye or corn, pumpkins raw, etc., etc.

ORCHARDS.

There cannot well be too many fruit trees and nut-bearing trees on a farm. Of the latter, they

are not only ornamental but useful and profitable for their nut-bearing, but valuable as timber trees. The Black Walnut, Pecan, Hickory, Oak, White Walnut, and Chestnut—all are growing scarce; and as lumber brings very high prices in the lumber yards, every owner of a farm should annually plant out a few hundred of these trees along his fences or corners of his fields, and other spots suitable, and where they would not interfere with the crop grounds. Fruits of all kinds ought to be planted. Those trees that are to be purchased, ought to be ordered from some reliable nursery as near home as possible, for various economic and other reasons. *Never buy of tree peddlers*, they are a plague; and have by swindling disgusted our people, so that many have given up tree-planting as a system. We would suggest a few apples and peaches of the older sorts, without which no orchard is complete in our humble judgment. For summer apples, we recommend Red Astracan, Keswick Codling, Early Joe, Paradise, Paine's Harvest, Delaware, Ladies' Choice, and Porter. Winter apples—Winter Catlin, Belle Fleur, Wine-sap, Russett, Pippins, Cart-house, Spitsenburgh, Black Coal, Baldwin and Pomme d'Api. Peaches—Old Mixon, free and cling, Lemon, Melacoton, Crawford's Late, Heath's Cling and Heath's Free. Great pains should be taken in planting, and the earth raised in a hill around the trees; next spring trim the head close, level the hillocks and work about them, then apply ashes or lime and mulch with coarse manure, salt, hay, straw or coal ashes three or four inches deep. To give satisfaction, fruit trees must be strictly attended for the first few years after planting. An ill-kept orchard is a "dead head" and an eye sore.

MILCH COWS.

To have a full supply of good butter for winter and some for sale, the milch cows must be generously fed before the grass fails too much. Pumpkins, apples, cabbage and new corn, with the green fodder is good food, with a pail of meal and water and a little salt at night.

RYE.

This crop ought now be high enough to hide the rabbits and partridges, but it is not too late to sow now on good, well prepared land, enriched with phosphatic fertilizers. If this be done, the farmer may expect a fair return for his labor and expense.

GRASSES.

Orchard Grass, Timothy and Red Top, may now be sown.

WHEAT.

To this very important crop, we have devoted this month a special article, prepared with some pains, which will be found elsewhere in the columns of the present number of the *Maryland Farmer*.

GARDEN WORK.

GARDEN WORK FOR OCTOBER.

This month is not a busy one with the Gardener. Much work may, however, be done if it has not already been properly kept free of grass and weeds during the season. If there are small fruits and dwarf trees to be added, or vacant places supplied, this is the month to plant them. Strawberries, Grapes, Pears, etc., may now be planted. Raspberries, Gooseberries and Currants, should now be set out. Plant them four feet apart in the rows, and the rows, from centre to centre, five or six feet apart. If ground is not scarce, good distances should be allowed between the plants. The land should be enriched, made light and mellow by deep spading, especially so about the spaces occupied by the plant. Cuttings of the currant ought to be set in a sheltered border, and well mulched, to become stocky plants to be set out next autumn or the year after.

Quinces.—Every garden should have a dozen or more of these ornamental (when properly kept) and useful fruit trees; they are always in great demand both in town and country for preserving and baking.

Celery.—Earth up to blanch, and keep the plants well watered; occasionally, they should have a treat of weak brine, or blackish water.

Endives.—Work, and tie up the plants to blanch.

Small Salading.—All sorts of small salading may yet be sown in the earliest portion of the month.

Rhubarb.—Sow seeds this month. By doing so, a year will be gained over those sown next spring. Why is it this excellent and wholesome plant, that makes such pies, are not more cultivated? The public seems to have lost the taste for the plant; owing, perhaps, to the high price gardeners held it at when it was so popular. It is easily grown, and would pay to sell at a low price. It comes, too, at a season when there is nothing fresh to make desert of.

Cauliflower and Brocoli.—Continue to work, and water freely when required.

Asparagus Beds.—These beds should be cleaned off, and the haulm, as soon as it turns yellow, cut off; fork the beds lightly, cover with well rotted stable manure, over which a coat of salt.

Spinach and Kale.—Sprinkle over these a light dressing of straw, chaff or leaves, &c., with some light brush to keep these light materials in place.

Lettuce.—Set out on a rich border, and protect as for spinach. Plants may be set four inches apart, in rows one foot apart.

Cabbage.—Prepare a very rich bed, make ridges parallel, six inches high, and thirty inches apart; beat the sides of the slopes with back of the spade and set the plants midway, the slope of the ridges on the north side. Fill the spaces between the ridges with coarse manure up to the lower leaves of the plants, cover with brush. Next spring this is removed, and the ridges levelled and the plants worked. Set the plants thick, as many will be lost and destroyed by vermin or varmints, and if all stand they can be thinned, and those pulled out, eaten as collards in very early spring.

LAWNS IN MIDSUMMER.

We have touched the renewing and improving of lawns time and time again, says the *Cleveland Herald*, yet every now and then we are button-holed on the street with: "I wish you would tell me what to do with my lawns." Well, we ask about it. "Why, somehow, the grass seems to have got thin, and don't look good and strong; the soil is rather light, although every year I have given it a top dressing of manure in the fall and raked it off in the spring."

Yes; we say, just as many another man, void of the knowledge of the wants of the grass roots, has done. You have supplied a little stimulus, and a very little one, to enable the plant to make a first start in the spring, by reason of the ammoniacal alkali obtained from the leaching of the manure during the winter; and as soon as that is exhausted, which generally is ere the heated season comes in, the plant has nothing but the poor old soil and its broken roots to support it. Now, if you would first sow over your lawn fine bone meal at the rate of eight bushels to the acre, then plaster at the rate of one bushel to the acre, then cover the whole half an inch thick with fine garden soil, leaf mould, or fine chip mould from an old wood yard pile, and then sow clean blue grass seed at the rate of two bushels to the acre, and then rake the whole with a fine tooth iron rake, finishing by rolling, we guarantee a lawn that will stay fresh and green all summer, no matter how dry the season. We hope that some of our button-holing friends will read this, cut it out and keep it.

REMEDY FOR BONE SPAVIN.—Take cantharides, 1 oz.; mercurial ointment, 2 oz.; tincture iodine, 1½ oz.; turpentine, 2 oz.; corrosive sublimate, 1½ dr. Mix the above with one pound lard. Clip the hair on the enlargement and apply for three days. Then wash clean with soap-suds, and grease it for two days; then apply the remedy again as before.

For the Maryland Farmer.

DEEP AND SHALLOW PLOWING.

BY D. LAWRENCE.

We notice in the Richmond, Va., *Southern Planter and Farmer*, a report of an experiment to test the comparative results of deep and shallow plowing. The soil was a medium grey, quite poor, with red clay subsoil. The experiment was made by V. Vaiden, Manager, Eastern Lunatic Asylum, Virginia, in the exceeding protracted drouth of the season of 1872, and six acres was the quantity of land under trial; and for his experiment and report the Virginia Agricultural Society awarded Mr. Vaiden a premium of \$100 and the diploma of the Society. The land was divided into six plots. On the first three, ninety bushels of compost—night-soil and a small portion of earth and sawdust—were applied. The other three were unmanured. When the land was measured, only half an acre in each plot was set apart for the test, so that the test stood thus:

PLOT.	DEPTH PLOWED.	PRODUCT.
No. 1, Manured.	14 inches,	976 pounds.
" 2, "	14 "	952 "
" 3, "	7 "	964 "
" 4, Unmanured,	4 "	824 "
" 5, "	7 "	847 "
" 6, "	14 "	672 "

The results of this experiment afford a variety of arguments—a contradictory variety. The advocates of shallow plowing will say: "Look at the above figures; where the ground was plowed 14 inches deep the product was 952; where it was plowed less deep by half, you get still more, 964; where it was plowed the shallowest, only 4 inches deep—what your deep plowers call only *scratching* the ground—you get the largest product of all, 976; and if this is the result of deep plowing, upon the very kind of sub-soil, a clay, which you deep plowers say will be most benefitted by deep plowing, why continue to advocate the system, particularly when we consider the great expense of subsoiling?" We have in mind a case of subsoiling in which the blacksmith shop was visited for repairs for the sub-soil plow, once and twice a day during the work; from the time and trouble spent in this effort on nine acres, we estimate that twenty-five acres could have been plowed four inches deep at the expense of plowing and sub-soiling the nine acres alluded to. If it costs \$2.00 to plow an acre, say six inches deep,—the usual estimate and a fair one,—it will cost from \$2.25 to \$3.00, according to soil, to go six inches deeper, as subsoils usually run where deepening is usually considered beneficial. The case on twenty-five acres—taking the experiment of Major Vaiden as the basis of calculation—would stand thus:

Cost of plowing twenty-five acres, four inches deep, at \$2.00 per acre, \$50.00.

Product from same at the rate given in the report under consideration, viz: 976 pounds per half acre—which is at the rate of 85 bushels per acre—875 bushels at 70 cents.....\$612 50
Deduct cost.....50 00
\$562 00

PROFIT.

Cost of plowing 25 acres, 4 inches, at \$2.00.....\$50 00
Cost of deepening 25 acres, 8 inches deeper, \$2.50.....62 50
\$112 50

Product from same, at the rate given in the report, on the land plowed 14 inches deep, 952 pounds per half acre,—84 bushels per acre,—850 bushels at 70 cents.....\$595 00
Deduct cost.....112 50

Profit\$482 50

The difference between the two profits shows the loss on deepening to be \$80.00.

(We have taken no account of the other expenses of the crop, presuming them to be the same in both cases, our object being to get at the *relative* profits of the two modes, and those additional expenses would not alter the relative results.)

You deep plowers may hold as a modification of your *deep* ideas that the land should not be TURNED UP so deep, but *worked* deep by subsoiling; this was the very plan pursued by Major Vaiden; the land on the 14 inch plot was plowed 8 inches deep at first and then subsoiled—loosened but not turned on top of the furrow—6 inches deeper. In cases like this which illustrate the superiority of shallow plowing, you are apt to fall back on the old line and dodge the question by saying: 'The land is better any how, and will more than make up for the loss by future productiveness.' But one chief argument in favor of deep cultivation, or rather deep preparation, is that it is immediately followed by good results. No writer on subsoiling has yet declared that the process would be unsatisfactory in its immediate results, but on the contrary it is always held that the first crop would respond to the extra work by extra returns; the said subsoiling resulting in the aeration of the soil, the consequent decomposition of organic and mineral plant food, the removal of surplus water by percolation and the contribution of a supply by capillary action in time of a scarcity, in the presentation to the young plant of a refuge in its cool and moist depths from the destroying rays of a mid-summer sun, and in the increase of the absorbing capacity of the soil, enabling it to retain a larger quantity of water to supply the necessities of the growing plant; behold the result of your theories. So would argue the shallow plowers from the report before us, as they quote the results from plots 1, 2 and 3.

Let us look at the matter on the other side, at the unmanured portion. Plot 4 was plowed 4 inches deep, with a product of 524 pounds; plot 5 was plowed 3 inches deeper with a larger product of 547 pounds; plot 6 was plowed 7 inches deeper, still with the largest product, 672 pounds. This is a complete offset to the above argument in favor of shallow working; for as in the above case the shallower the plowing the better the crop. In a regular ascending arithmetical series with a common difference, so in this case the deeper the plowing the better the crop. But here, in justice to the shallow plowers, we must admit the question, did the subsoiling pay? For we are of those who believe in that kind of agriculture that pays, and we believe also if a process does not *pay* in dollars and cents we have no use for it in our ordinary agriculture—by ordinary agriculture we mean the kind we must make our living by.

Let us state the case and see if it did pay.

Cost of plowing, say 25 acres, 4 inches at \$2.00 per acre.....	\$ 50 00
Product at the rate of plot 4, which is 1048 pounds per acre—468 bushels at 70 cts.....	326 90
Deduct cost of plowing.....	50 00
	<hr/>
	\$276 90
PROFIT.	
Cost of plowing 25 acres at \$2.00.....	\$ 50 00
" subsoiling 25 acres at \$2.50	62 50
	<hr/>
	\$112 50
Product at the rate of subsoiled plot 6, which is 1344 pounds per acre—600 bushels at 70 cts.....	\$420 00
Deduct cost of plowing.....	112 50
	<hr/>
Profit.....	307 50
Profit on 4-inch land.....	276 90
	<hr/>
Balance in favor of subsoiling	30 60

In other words, the cost of subsoiling has been paid by the very first crop, and thirty dollars cleared besides. Now, it is not in accordance with the principles of agricultural book-keeping, as stated in previous numbers of the *Maryland Farmer*, to change the present crop with permanent improvements. We have in mind a ten acre field, which was drained, cleared of a swamp, grubbed and freed from stones, and then subsoiled. It would not be a fair statement of the account to charge the first few crops with this heavy expense, because the improvements will last many years and be felt by many crops, and the expense should be divided, in the statement of the crop account, to ascertain where there is profit and where loss among all the crops which are benefitted by such improvements, even if the time extends fifty years. Subsoiling, although not a permanent improvement is a durable improvement, and the expense attending it may reasonably be divided among the crops of one rotation, if the process is not repeated; but where results point so plainly to the benefit derived from the process, no good farmer will

omit its repetition; hence, Major V. has effected a durable improvement of his land, and got his money back and thirty dollars besides; a most favorable demonstration of the benefit of deep plowing and subsoiling. But this does not solve the mystery attached to the other experiment, and our only resource is in the conjecture that the manure was applied on top and plowed under on the manure plots which show so unfavorably for subsoiling. The report does not state the manner of the application of the manure, but it is reasonable to suppose that, in turning over a furrow upon which fine friable manure had been applied to the surface, much of it would fall into the loosened subsoil; and, being under the ground eight or nine inches, would not so readily be found by the plant roots as in the soil plowed only four inches deep, particularly if we bear in mind that the ground was worked not over four inches deep at any time subsequent to the first plowing.

It is a common remark that, fertilizers in a dry season, and particularly on light land, "fire" the crops; that is, scorch the leaves and render the plant more susceptible to the rays of the sun and the heat of the soil in the fiery time of a summer drought, but no such "firing" is reported of this plot. Has any reader of the *Maryland Farmer* ever got a worse crop from manured land than from unmanured? We are skeptical on this point, and are willing to take testimony on the subject.

We have in mind a *very* poor knoll on a very poor farm, on which some corn rows were left unfertilized, to ascertain the strength of the manure (Commercial) used on the other rows. The difference was *vast* in favor of the manured rows, amounting almost to crop and no crop; and it strikes us that, if the manure *was* plowed under, the friends of deep plowing have no cause, so far as the results of this experiment are concerned, to abate one particle of their faith in the process; if the result should, however, be unfavorable in this instance, it is only one case, and the great mass of testimony on the other side more than restores it to favor.

REMEDY FOR MANGE IN SWINE.—First wash the hog well in soapsuds; then to one pint of lard, while hot, add one ounce of carbolic acid, stirring it until it is cool. Rub the hog two or three times with this, for several days, and give yourself no uneasiness about the mange.

It is better to be a good farmer than a second class professional. There are a thousand chances to one that a young man will make a third-class lawyer or doctor, or a preacher of still lower grade,

CULTURE OF ROOT CROPS.

At a recent meeting of the Central Delaware Fruit Growers' Association, the following, on the culture of Roots, was presented by Mr. Gilchrist, chairman of the Agricultural Committee:

It is well known to the members of this Association, that in New York and the New England States, farmers find it necessary to prepare winter food for stock, for at least six months of the year. On account of these long and rigorous winters (requiring nearly, if not all, the produce of the farm to winter stock) Northern farmers have been looking for, and anxiously desiring, a milder climate. From advertisements in various papers and registers, and from assurances of seemingly disinterested parties, many were led to believe, that (in *this respect*) Southern Delaware was *all* that could be desired. There being no snow and but little frost, stock could be pastured ten months of the year, and during the remaining two months need not even be housed but could be (as well) fed in the open field, thus accounting for the *Lillibutian* barns. But experience teaches very differently. Although the winters *are* mild, and the *climate* generally *delightful*, yet the soil, not being naturally adapted to grass, stock must be fed as long if not longer than in more northern latitudes. Good northern farmers, although having an abundance of hay, corn-fodder, straw and grain, (*i. e.* a variety of food,) consider a supply of roots as almost indispensable, to keeping stock in a healthy thriving condition. Here coarse food is *always scarce*, and consequently *high*; because the land, being exhausted by constant cropping of corn, does not in many cases yield enough fodder to pay for the labor of topping and stripping. If, therefore, we Delaware farmers would make the keeping of stock profitable, we must have resort to something that shall be far more productive, and raised at far less expense than corn-fodder. What shall it be? From countless trials by European and American agriculturists, it has been found that, good ground, with proper manure and culture, will produce a greater quantity of nutritious food for animals to the acre in roots than in any other crop. Carrots are generally considered of more value per bushel for feeding purposes than beets, turnips or parsnips, yet to the great majority of farmers, beets are to be recommended above all others, on account of their easy cultivation and great productiveness.

VARIETIES.

There are but two varieties of beets in general use for the field, the Sugar Beet and the Mangel Wurzel, both of which have several sub-varieties. Of these, the sugar beet being very rich in saccharine matter, is now cultivated very extensively in France and Germany, and to a limited extent in England and our own country for making sugar. The mangels are raised for feed only, and, considering their great yield, are to be preferred.

SOILS.

To raise *profitable crops* the beet requires rich ground, (indeed, it cannot be made too rich,) and, like all tap roots, delights in a deep, loose soil.

That best adapted to it, is a strong loam free from hard clay, though they will do well on any soil sufficiently rich.

PREPARATION OF SOIL.

The land selected for this crop should be deeply plowed and thoroughly pulverized by harrowing. As an evidence of the value of deep plowing, it may be stated that in England beet roots have been known to stop drains three feet under the surface. The Germans plow eighteen inches deep for this crop. Indeed, the deeper the soil the better, as every additional inch the roots strike down, enables them to draw nutriment from an additional hundred tons of soil per acre.

PLANTING.

The seed, before sowing, should be soaked twenty-four hours in blood-warm water, and if to be sown by drill, dried by rolling in plaster. It should be sown in drills not less than two feet apart and covered not less than an inch deep. An acre will require from four to six pounds of seed.

CULTURE.

As soon as the plants are sufficiently large not to be easily covered up, a cultivator, made for the purpose, should be run between the rows, and repeated at least once a week as long as the plants will not be injured by breaking the leaves. They should be thinned to a distance of one foot in the row, and of course kept perfectly free of weeds by hand, weeding and hoeing during the entire season. Scarcely any disease or enemy troubles them, except when young. It is then sometimes, though rarely, attacked by small grubs or insects. The remedy is in sowing plenty of seed. Should there be spaces left vacant by bad seed or insects, they can be readily filled up by transplanting in a moist time.

HARVESTING.

Beets should be harvested before the cold and frosty nights arrive, as the freezing of the tops injures their value for feeding purposes. It has been estimated by observing farmers, that the tops of a good acre of carrots or beets are equal in value to an acre of timothy hay for feeding purposes. They are invaluable at that time of year to feed cows to keep up a full flow of milk, when pastures are failing. In France they are used very largely as food for cattle. The great difficulty has been to preserve them in their fresh state, on account of their readiness to decompose; but it has been ascertained that by subjecting the leaves to the action of dilute hydrochloric acid, they can be stacked away in large quantities and kept in a fresh state for future use. If intended for keeping late the tops must not be too closely trimmed, and care must be taken not to bruise or break the roots. It is asserted by some that it is not safe to feed Mangolds to stock until about the 1st of January, as they are not entirely ripe until then. We have never observed any injury resulting from feeding them at *any time in reasonable quantities*.

YIELD.

The yield varies from five hundred to one thousand bushels per acre, depending very much

upon the fertility of the soil and thoroughness of culture, but more, perhaps, than all else on the season. Beets require a moist climate—plenty of rain, and for this reason we would not sow the seed here before the 1st of June, thus allowing the roots to grow and mature during the fall months. Instances are on record in England, of seventy tons or twenty-three hundred bushels being produced on a single acre, and the average of a county in Vermont is stated by a good authority to be one thousand bushels per acre. Whether these statements are reliable or not, one of your committee has raised from one-eighth of an acre over one hundred bushels of Mangolds, and was confident, had the ground been fully occupied, he would have had nearly if not quite double that amount.

MUSHROOMS IN PASTURES.

From a correspondent in *Land and Water*, we copy the following:

"Believing it possible to grow mushrooms in pastures I last year made some experiments which I think were successful. The course of reasoning which led to them is too long to detail now, but the *modus operandi* was as follows: Wishing to plant a pasture field near my house, I proceeded thus: I broke up mushroom spawn into pieces from the size of a filbert to that of a small walnut, and set a small boy to spawn the droppings of the cows and horses by making a hole with a potato-dibber or small crowbar (called here a fold-pitcher) through the droppings and about one and a half inches into the mould beneath. A piece of spawn was dropped into this, and a vigorous stamp with the heel of the heavy boot completed the process. I used less than half a bushel of spawn, and was, as I believe, largely repaid for my trouble and expense in mushrooms during the natural season. I began the same process again yesterday, and hope to have more convincing proofs of the success of my plan this year. I think a crop may even be secured after May, but I should not expect that spawning could be carried on with much expectation of result after the middle of July. If my experiment be made public, I am in hopes that more exact operators than myself will work out the idea till a crop of fine mushrooms may become as certain as turnips."

IN CASE OF COLIC, the first thing to do is to give an injection of water. It is not necessary to put soap or anything else in it. Blanket the horse, rub his legs, ears, and bowels, and if he does not get better in half an hour give a table-spoonful of laudanum and two table-spoonfuls of ether.

Labor is the original purchase money for all things having exchangeable value.

For the *Maryland Farmer*.

JAKOBB DUNK ON COWS.

NUMBER FOUR.

MISTUR EDITUR:—I sed I'd show 'im up on a good menny things, jes fur a off set to wat he's ben a tellin' on the way I git along with mi farmin' matters; and this time I want to tell you how he served me on kows. He's allers tryin' sum new thing; wat them old time peeple did aint good enough fur *him*, and consequently he's huntin' nite an' day fur sumthing fur an exkuse to depart from the ways ov other peeple. This time he's taken a notion to go into kows, an' leave oph raisin' weet an' korn an' terbakker, an' all them things wat has made us the grate kountry we are, an' has given such universal delite an' satisfaction to them furren kountries, that we've kept from starvation from their infancy. Now, Mistur Editur, a phew kows to run round the kommons an' on the ole sedge fields, and to go onter the stubble an' pick up things is a very good thing in its way, leastways fur wimmin folks an' the children; an' then wen you've got a lot o' straw an' fodder on hand, its as well to keep a few ov 'em to work it into manure; but to go to tearin' down stables that's good enough fur a hoss, an' put up bildins as tite as an uven fur kows, an' to git all manner ov apothekerry's tools, sich as sick lakomakers* an' long glass tumbler, an' bulk thekometers, an' way every kow's milk an see how much kreem she gives, an' note the kuler ov it, an' wen its the richest, an' wat kow gives the richest milk; an' feed 'em on korn meal an' weet bran in the sum-mertime, an' tha got a plenty ov grass a layin' by 'em that tha kant eat, an' runnin' off to a clover patch with a scythe to git sum fresh bites for 'em, an' all that, is a kumplete humbug; and he'll find it out, too, 'fore he gits to the end ov it.

But wat I wanted to do this time a ritin', is to show up the trick the Joodge played on me; an' how he cheeted me in gittin' away two ov mi best kows. I was kommin' from the Codge wun mornin' when sez he, "Enny good kows on hand, more'n you want to keep over?" and, sez I, "I don't keer ef I do sell a kouple; grass is very poor: I shant cut mutch hay, an' the hosses 'll eat up the fodder, an' pasturs faillin'." "What do you hold 'em at?" sez he. Knowin' he was sharp at a trade, and it warnt no use a foolin' him, sez I, "don't know what kows iz worth; how are tha sellin' ov 'em round?" Sez he, "kows is wuth from fifteen to forty dollars, kordin' to quality." "Well," sez I, "kum over an' look at 'em, mebbey we kin hitch;" an' next mornin', 'bout milkin' time, who should drive up but him, bringing up a hull case of instruments sich as tubes an' gages, (as he kalls 'em,) an' lakhometers, an' them bulk things 'nough to set up a drug shop. "Wat's them?" sez I. He began to explain 'bout how he kood tell all 'bout kows wuth 'em; an' sez I, "Joodge, its all a humbug to git such fellers as you to buy 'em; none ov 'em ole time peeple had them kunjurashons, an' I guess *tha* had good kows, or whar did yer good kows now kum from? rained down, I 'spose," sez I.

*Perhaps our correspondent means sink lactometer and bulb thermometer. - EDS.

He did'n't say nothin'; but, after each kow was milked, he took out a little way-scales and way'd it; then filled up a long strate bottle till he had wun fur each kow, put 'em down into the dairy into sich a queer lookin' box fur a kase that its perfectly ondeskribable; nothin' but a piktur of it kood do jestice to mi feelins, an' ef it was once printed, he'd loose *his* karakter; fur nobody kin karry sich masheenery to nabors' houses, an' meen fair play with 'em. "Well," sez he, "don't tech this here kreemgage, an' I'll kom back some time to-morrow." An' then he takes out his writin' book an' writes down sumthing, and then pulls out ov a blue paste board roll, slips oph the kover, an' out kums another long glass bottle without cork, neck, top nor bottum, an' figgers all along on the inside ov it. This he pokes wun end ov into the spring, then agin into the channil in the spring-house, "An'," sez he, "fifty-eight, all right;" an' oph he goes, an' sed nothin' 'bout kows nor price; how much tha give; when tha was fresh, and will be fresh agin; if tha was gentle or rogish; how old thay was, an' forty other questions I an' everybody else in this part ov the world allers asks wen we go to buy a kow kritter. Sez I, to myself, "Ennyhow, it's a queer way to buy a kow with glass bottles;" and, thinks I, "I'll look into this matter an' see how a few little contrapshuns kin anser all them questions. So, nex mornin' after milkin', I went down into the milk-house an' looked at his institushuns; an' I walked roun it a little, keepin' away frum it at first, fur wat I know'd 'bout it it might be a trap or bite, or sumthing ov that kind; tha've got so menmy artikles out now-a-days, you kan't be too keerful; but I worked up to it an' it did'n't move; so I got down to it an' then I seed wat the Joodge was up to. Sum ov them little bottles was pooty nigh half full o' kreem, an' sum had only a thin skim on 'em; an', sez I, "I've got you now! now I'll pay you up fur sum o' them things you rote about me." So, wat does I do, but change every bottle to another place in the cage; mixed 'em all up; put 'em that had the least kreem in 'em in the place ov them at had most; and, sez I, "now we'll see the result ov yer high farmin'," fur I seed at once that wat he was a doin' was to find out which o' mi kows was givin' the bes milk. Bymeby he drives up, an' we went to the milk-house, an' mi mouth was on a broad grin redly to bust out in a hoss laff when I found the Joodge got into a diffikulty 'bout the kreem; but he takes out his pensil an' book, looks at the little bottles wat I hed mixed up, makes sum figgers, an' kep very serous as tho' everything was smooth with him. An' as he made no fuss, I did'n't neither; an', thinks I, he's got it all writ down so that the changin' ov 'em don't make no deffrence, an' ef he don't keer, why I don't, an' I wont say nothin' about it. So we began about the trade, but I'd made up mi mind not to part on no account with them kows that gave so much kreem to their milk, an' I knowd he'd offer me the best price for the best kows, an' these was the ones I ment to keep. "Jakobb," sez he, "how do you hold your kattle?" "Don't know," sez I, "what are tha wuth?" Sez he, lookin' at his book, "I'll give you twenty dollars for Whitey, twenty-five fur Pussey, thirty-five fur Spotty, an' forty fur Reddy, enny two I'll take at them figgers." So I konkluded to let him

have the two poorest, an' he paid the money an' took 'em away. An' now it turns out he's makin' twenty poun o' butter a week oph them two kows o' mine, an' sez he would'n't take two hundred dollars fur the pare, an' he only 'lowed me forty-five fur the two. *He's* yer hifalutin, three-story barn farmer that's a fine kristin gentleman; *he's* a modern pattern o' the new school that held up as lites fur the new generashun to go by; its all rite to take a set o' tools to a poor man's house, an' bottle him out o' two splendid kows fur a mere song; is them the men we've got to follow after to git ritche and roll over the smooth rode in our karriages?

An' I don't believe in byin' kows by bottles yit, an' I inten to keep on showin' 'im up, leastways till he pays me another hundred on them kows o' mine.

Yours, hily indignant,

JAKOBB DUNK.

As the Joodge is playing a very conspicuous part in the organization of farmers in different parts of Maryland, as well as contributing to our columns, perhaps our readers would like to know what kind of a farmer he is, "ennyhow," as Jakobb would express it, how his crops thresh out, &c. We learn that, notwithstanding experiments with six different kinds of wheat on the same field, and the planting of a field which a few years ago contained a marsh which *held up* two feet of water, the land produced thirty bushels to the acre, part of which was the bed of an old branch; and, adjoining which, our informant states he has seen boys swimming. Perhaps the Joodge and Jakobb will have a talk about it, and tell us how it was done. We know that thirty bushels per acre is not a new thing for Maryiand, and we have great faith in Maryland farms if Maryland farmers will do justice to their land. The Joodge's oat crop is about twenty-five bushels, the average of the section being six or eight bushels, in consequence of the very severe drought which has afflicted the country so greatly the past season.

CITRIC ACID may be prepared from ripe currants in the following manner: The currants are first broken up by pounding or squeezing; the juice is then pressed out and allowed to ferment. When fermentation ceases, the alcohol is distilled off and the residue neutralized with fine chalk. In this way citrate of lime is formed, which is afterward decomposed by sulphuric acid and the citric acid set free. From one hundred and ten pounds of fruit there should be obtained about one pound of citric acid, beside a considerable quantity of alcohol. A dilute solution of citric acid furnishes a pleasant and healthful drink, and, although lemonade is usually made from lemons, we would not, says the *Journal of Applied Chemistry*, be far wrong in calling this drink lemonade, although prepared from currants.

HORTICULTURAL.

PEAR CULTURE.

A correspondent in the *Peninsular News*, (Del.) reviewing the reports of the Central Delaware Fruit Growers' Association, on "Fertilizers and Pears for Delaware," writes as follows on the culture of the latter:

"Your committee's list of Pears contains some of the best varieties, some that have not been sufficiently tested, and some that have been tried only to be regrafted. An amateur's list, or a list for a private family orchard, is one thing; market is another. For market the qualities are:

1st. Strong, vigorous growers and productive trees, freedom from blight.

2d. Early fruiting.

3d. Good size and fine color.

4th. Good flavor, and good keepers, that will not force you into the market at an unfavorable time. They must not rot at the core, or become mealy and insipid as soon as ripe. The leaves of the tree must not fall prematurely, as is the case with some varieties.

For an orchard of five acres I will give you my list of such as I know in Delaware to have all the qualities I have named, and none of the drawbacks:

Standards set 20x20, making 543 trees on five acres.

200 Bartlett,	-	-	-	ripens in Sept.
100 Sheldon,	-	-	-	" " Oct.
145 Lawrence,	-	-	-	" " Dec.-Jan.

Dwarfs between the Standards, each way, making 1635 Dwarfs on five acres.

300 Beure De Anjou, ripens Oct.-Jan.

800 Dutchesse Angouleme, Oct.-Nov.

535 Vicar of Winkfield, Nov.-Mar.

This list will furnish a market succession to make it an object for the dealer to wait on you.

My object in setting three Dwarfs to one Standard, is to make the ground pay better for the first twenty years. The Dwarfs, the first twenty years, will pay all the outlay, estimating the manure at \$100 an acre, and the trees at \$150 a thousand, many times over before the Standards will need the room, say twenty years. Some of my Dwarfs set this Spring had pears on till January, and then were removed, and many were in blossom, even of the Standard Bartletts. In three years a half a basket to the tree may be expected, and in six a basket to a tree, and from that time one from two to twelve baskets to a tree, according to culture.

I look out upon a tree as I write, twenty years old, a Dutchesse, from which the yield is seldom less

than, and sometimes twenty baskets a year, as I am told. The Dutchesse sold last Fall in Nov. for \$3 a basket, or \$15 per bbl. when held back till November.

It will pay to set Dwarfs between the Standards each way, and then well manure and deeply till to the depth of two feet, using potash freely. There is no danger of planting too many fruit trees on this Peninsula. All the talk of overstocking the market with fruits is bosh, and comes from large growers, many of whom have grown and are growing rich in raising fruit. Every acre to small fruits is a blessing to crowded manufacturing cities of the North and East. Every peach, pear, plum, cherry, apricot, or quince tree planted and made to produce to its utmost, will pay the grower better than any grain he can raise. We want peaches so abundant, and new routes so numerous, and transportation so low that any laborer East or North can afford to be a consumer of all our various fruits, both fresh and canned.

Could consumers get peaches at \$2.00 a crate, or bushel; pears at \$5.00 a bbl., the present number of bushels of either of these fruits consumed would be increased, if the small villages as well as large cities could be supplied, fifty if not one hundred fold. At 50 cts. a bushel for pears or peaches, one can be raised as cheaply as the other. Fifty dollars an acre can be realized, on an average, from year to year."

DISEASES OF PEAR TREES.

A correspondent, G. F. B. L., in Norfolk, Va., writes the *Georgia Farmer and Gardener*, as follows:

I promised to let you hear from me, if I learned anything on the subject of Pear blight.

I must confess that its solution is the most incomprehensible of any point connected with pomology.

I have not attempted to read on the subject, but strictly confine myself to observation.

I notice the following diseases (you can name them): 1st, a disease that attacks the roots of the tree; the fibrous roots decayed, the large roots, having the appearance of having been white-washed, but upon close examination is made up of a spongy, white coating. No particular appearance of disease above ground; but the leaves all die at one time. I have lost two trees from this disease this season.

The next disease is as unlike the above as measles is from yellow fever, and has been more troublesome this season than it has been for the past fifteen years.

The roots and fibrous roots remain perfect, and the disease is entirely above ground, sometimes attacking the end of a limb and running down from six inches to the whole length of the limb sometimes skipping the space of a foot or more and then killing the bark quite round the limb, perhaps only a few inches in length.

I have lost several limbs, but no entire tree from this disease. I am inclined to trace the cause of this disease to an unnatural condition of the soil and atmosphere. It commenced here after the fruit had acquired some size, and continued through the cold wet period, and suddenly disappeared when the hot and dry weather set in.

Were it not for the fact that carbolate of lime and sulphur appears to be almost a specific for it, I should be inclined to attribute it to poison in some form drawn from the soil or atmosphere, but when we reflect that carbolic lime and sulphur makes sure death to lower grades of the insect family, the inference is that this disease is traceable to insect cause.

This disease paid this section of Virginia a visit about fifteen years since. About fifty-two years ago it nearly devastated the Pear trees, and many Apple orchards were swept away. The third and last disease is comparatively harmless; it is the burning of the leaves without imparting disease to the wood. The worst effect is to render the fruit astringent. This is as far as my observations extend this season.

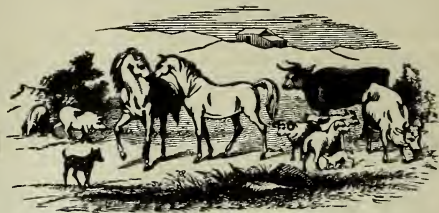
PEACH ORCHARDS.

The following suggestions we clip from a report on Peaches made to the Central Delaware Fruit Growers Association, by the chairman, Mr. W. R. Phillips:

Peach Orchards may be cultivated for a few years after planting, with root or other hoed crops. It is considered that the mellowing of the surface and the manuring given to those crops add to the vigor of the growing trees; but when an orchard becomes five years old, the soil is filled with roots near the surface, the constant destruction of which by the plow tends to injure the trees. Therefore, after this period, only the most shallow cultivation should be given, and no crops which exhaust the ground should be grown.

The ground should be kept clear of grass and weeds. Every Spring shorten in the previous year's growth until you have a well-balanced head. Keep the head low, so as to protect the trunk from the hot sun. Examine the trees in May and August, and extract all the worms that are at work about the roots. To prevent their depredations, put about the base of the trees a shovelful of leached ashes.

Live Stock Register.



VALUE OF THOROUGH-BRED STOCK.

Very many farmers who rely in part for their profits on the horned cattle they keep continue to grow only the unimproved, inferior varieties which have descended to them from the random stock kept by their forefathers. The following analysis of the reported results of two auction sales in Illinois of short-horn stock may suggest to such farmers the wisdom of exchanging their scrubby cattle for improved breeds. The first of the sales referred to was of short-horn cattle owned by J. H. Spears & Sons, of Forrest Hill, near Tallula, Menard County. The sixty head sold were all purchased by the Messrs. Spears in Kentucky last Autumn, most of them from the herd of William Warfield, of Lexington. Twenty-six were bulls, and the remainder were cows. The latter sold as follows: One calf, \$100; 9 yearlings, average \$307.83 per head; 9 two-year olds, average \$448.33; 1 three-year old, \$230; another with a bull calf beside it, \$1,510; 3 four-year olds, average \$256.67; 1 five years old, \$340; 1 six years old, \$250; 1 seven years old, \$795; 2 eight years old, \$175 and \$225; 1 eleven years old, and calf beside it, \$295; 2 twelve years old, one \$150, and the other with twin calves, \$500; 2, the ages not given, \$225 and \$260. Total, \$11,630.50. The twenty-six bulls sold as follows: 1 calf, \$105; 16 yearlings, average \$274.06; 7 two-year olds, \$233.57; 1 three years old, \$330; 1 four years old, \$210. Total, \$6,665. Total for the herd, \$18,295.50. Average per head, \$304.92. The next day, June 12, at Springfield, Edward Iles sold at auction from his herd thirty-seven head. Eight were bulls, and sold as follows: Cherub, three years old, imported from England, \$6,000; sired by him, 1 calf, \$150; 1 yearling, \$525; another, \$1,300; 3 yearlings, (not of Cherub's stock,) average, \$135, and 1 two years old, \$185. The twenty-nine cows and heifers brought: 1 calf, \$525; 5 yearlings, average \$771; 10 two-year olds, average \$763.50, the extremes being \$185 and \$1,125; 4 three-year olds, average \$1037.50, extremes \$625 and \$1,650; 2 four-year olds, \$755 and \$1,700; 4 five-year

olds, average \$1,546.25, extremes \$650 and \$2,500; 2 nine-year olds, \$310 and \$500; 1 ten-year old, \$625; average price per head for the 29, \$904 82; for the 37, \$940.70. The average price per head for the 35 yearlings sold at the two auctions was \$378.30; for the 27 two-year olds, \$499.63.

WATER FOR SHEEP.

It is a great mistake, and the cause of much suffering and loss, not to supply sheep with water, especially milk-giving ewes. During the drouth of 1868 many flocks were ruined by want of water. I know of a striking instance where the animals wasted and were sent to Chelmsford market in evil condition, the owner being ignorant of the cause. The dealer, who bought them "for a song," first examined the whites of their eyes, thinking they must have the rot or jaundice; but seeing all right so far, he found that a supply of water was the only restorative required. Grass, in a succulent state, contains 76 per cent. of moisture, but when dried very much less. The same remark holds good for clovers, &c. When we give cake, corn, maltcombs, bran, &c., which we always do, it becomes absolutely necessary to provide water, or the animals will not thrive. Give them the opportunity of judging for themselves by an always available supply, and they will exercise a proper discretion in the matter. An iron water-cart is on most farms an indispensable requisite. When food is too wet and "sloppy," dry cotton cake or corn is a good and profitable regulator. Turnips and mangolds are disproportionately watery as food for animals, hence the losses occasioned by them, especially with breeding sheep. They contain fully 9 pints of water to 1 pint of dry food. Ninety per cent. of water is too much; 75 to 76 per cent. in pasture grass is the more natural and proper proportion. The human or animal frame has 75 per cent. of water, just as good grass has. Meat is dear as food because it contains, in the lean portions, 76 per cent. of water. No wonder that bread and cheese are found far more economical.

J. J. MECHL.

WHAT HORSES SHALL WE RAISE?

In Pennsylvania the tendency is to large English horses, short and heavy in the legs, and broad in the back. For cart horses or railways, or where frequent rests occur, they do well enough, but for the plow, heavy wagoning or long-continued pulls they are failures. In Ohio the tendency is to small, light horses. Our roads are smooth and

hills easy to ascend and descend, and our wagons narrower, wheels higher and loads lighter than in Pennsylvania; still, the horses may be *too* light and small. Your small horses are more muscular in proportion to their size than the larger ones. They may look well enough in towns, and are adapted to most of the wants of the livery and express business, but they do not make serviceable farm horses, nor really elegant carriage horses.

The horse we need should weigh from 1,250 to 1,450 pounds, head rather small, eyes wide apart, nostrils large and thin, clean limbed and limbs well proportioned to his weight, neck arching, a good depth from withers to point of shoulders, ribs well rounded, full chest, short from withers to point of haunches, sweeping mane and tail, and small hoof. This horse will sell well in any market, and should embrace about seven-tenths of all the horses raised. The others may be divided into, horses lighter than 1,200, one tenth, over 1,450, two-tenths.

The deterioration of our horses is due to the mistaken idea of farmers that as long as a mare will breed, she should be kept at it, regardless of her age, system or work, and that any horse is good enough to breed from. It need not be more than ten years until we have a far different breed of horses on every farm if farmers would only adopt the right course. No part of farm work comes in so opportune or makes so good a return as raising horses, and the better they are the higher their market value.—*Ohio Farmer.*

MANAGEMENT OF DAIRY COWS.

In the management of dairy cows, these general principles are suggested by Mr. Waring:

1. The cow should be constantly kept in a thrifty, healthy condition, and with a voracious appetite. The great end of her life, the production of milk, cannot be accomplished unless she is comfortable and cheerful, and unless she consumes the largest amount of food that it is possible for her to take into her stomach without injury to her health.

2. The character of the food should conform to the end it is desired to attain; if for milk to be sold, to stimulate the production of *quantity*, and, incidentally, to induce the drinking of a large amount of water, while for making butter the food should be less watery in its character, and much richer in *quality*.

3. Pregnant animals, in addition to the demand which the secretion of milk makes upon their digestive organs, require a certain quantity of food, and food of the most nutritious character, for the development of the fœtus.

4. The stock should be so fed that the manure heap be made as rich as is consistent with profitable feeding.

AN ECONOMICAL LIME-KILN.

The value of lime for agricultural purposes has brought it into use wherever it can be obtained at a reasonable cost. The art of making it is so simple and easy as to allow every farmer who can cheaply procure limestone, (or shells,) to make it a part of his regular operations to burn his own lime. It is desirable, therefore, that he should have the means of doing so at the least possible expense. All that has been written for our reports, heretofore, on the subject of burning lime, has too many scientific details interwoven with the practical portions to be readily comprehended by the unlearned. What a farmer wants to know is how to build a kiln, how to fill and fire it, and how to use it, and how all this may be done at the least possible expense. I have undertaken to elucidate these points by drawings and directions which can be easily understood.

There are two classes who engage in burning lime. One pursues it as a business—to make profit by selling to others. The other burns lime for his own use. Of the first it may be said that the time occupied in the process of burning is an essential element in the success of his business; hence the construction of his kilns with expensive chimneys to secure uninterrupted draught, even by means of blowers when necessary—the only means of keeping his laborers constantly employed. But to the farmer, who burns lime for his own purposes, it is a matter of little importance whether his kiln burns out in twenty-four hours, (as it may be made to do by artificial means) or whether it occupies a week to produce the same result, because constant attention is not required as a matter of profit. Besides, it is a work which can be done at seasons when it will not interfere with the ordinary operations of the farm. The kiln once filled with stone and coal, and fired, may be left to do its own work, requiring only occasional regulation of the draught.

The kiln should be built in a side bank, so high that a wagon-load of stone driven near the top can be placed upon a platform, and there be broken into convenient sizes for burning, and from thence be thrown by hand or shovel into the kiln. This platform should be about four feet wide, and extend the whole length of the rear side of the kiln; and it should be as high as the wagon, and on a level with the top of the kiln, or nearly so. The kiln may be built of any kind of stone which will make a strong wall, and should be well bound throughout, on all sides, with planks and logs. Without this, the expansion and contraction occasioned by the heating and cooling would soon

destroy the walls, however strong. The inner wall should be a foot thick, and constructed of materials indestructible by heat, such as fire-brick or soapstone—the latter being preferable. One thus lined, which I have had in use for many years, is seemingly as perfect as when built; and it is not even a pure soapstone, but “bastard,” found in many places in the mountains of Pennsylvania and elsewhere. The iron bars of the grate should be narrower on top than on the bottom, and they should rest loosely on cross-bars, so that they may be shoved to one side or the other, and allow the lime to pass through, as may be needed, when taken out. The hinder part of the grate should be elevated, so as to throw the lime forward as it is taken out at the front. This is either a draw-kiln, from which you may take the lime as it is burned, and continue to fill at the top, or a permanent kiln, as you may be pleased to use it. To fire the kiln, at first, the bottom, for two or three feet in depth, should be filled with dry materials, such as old stumps, rails, corn-cobs, and the like; then put in the coal, and stone, (or shells,) in alternate layers, each deep enough to hide the preceding layer. Then fill the eye of the kiln with dry kindling-wood, and set fire to it. When the mass becomes thoroughly on fire, it may be necessary to close the eye of the kiln with boards, to moderate the draft; for, on very windy days, I have known the draught to be so strong as to carry the fire straight upward to the top, without perfectly reaching the sides.

On limestone farms, the fields of which require that the stones be hauled away as they are turned up by the plow, such a kiln is the place to put them, that they may be turned into lime when the farmer has little else to do.—*Correspondence Agricultural Report.*

ADULTERATION OF BONE DUST.

It has been ascertained that the powder of the vegetable ivory-nut is used very largely for the adulteration of bone-dust, being so similar as to be very difficult of distinction. Even the microscope scarcely furnishes a satisfactory means of determining the facts in the case, especially if the external envelope of the fruit has been carefully removed. The best method, however, short of chemical analysis, is said to consist in throwing the suspected substance upon hot coals. If vegetable ivory be present, a pleasant odor, like that of roasted coffee, will be immediately diffused, while bone-dust yields a disagreeable animal odor. The precise proportion of the two substances can only be determined by chemical analysis.

THE USE OF PLASTER.

The following statement of the use and value of Plaster or Gypsum was communicated to the Farmers' Club of New York city, by W. T. Early :

"Plaster acts as a condenser of the ammonia of the atmosphere and of the soil. Plaster of Paris is composed of sulphuric acid and lime. A bushel of this substance, if it acted as a manure, would clearly exert but a very small effect upon an acre of land by its chemical action upon plants, or by entering into combination in the growth of crops. By observation, however, it is concluded that Plaster of Paris acts as a condenser of ammonia, which is found everywhere in the atmosphere and in all soils to a limited extent—that it holds this most subtle and powerful manure in its grasp, fixes it and gives it out to the growth of plants as they require it, instead of allowing the ammonia to pass away and remain unfixed and unadapted to plant growth.

"There are a few phenomena which seem to me to fully establish the fact that this is the true explanation of the action of plaster: That only a certain amount will act. Thus a bushel to the acre, sown upon a clover field, acts as well as fifty bushels—showing that it does not act as a manure, as a stimulant, or a gastric juice, or in any other manner analogous to any of these agencies.

"Sow a field with plaster in clover, or any other grass, leaving out a breadth, or in plastering a crop of tobacco—as I have frequently seen it done—leaving a few rows without the application, and the result will be that, while the parts of the crop to which the plaster is applied will be flourishing and green, those on which no plaster is put will be yellow and worthless, indeed greatly inferior to what they would have been had no plaster been placed in the adjacent parts of the field.

"How can this be explained except upon the hypothesis that the plaster draws from the atmosphere passing over it a part of its fertilizing properties and retains it for the use of the plants in proximity to it, while those portions where there is no plaster do not thus derive this greater share from the atmosphere?

"Again, sow upon a dunghill, steaming and giving off ammonia, a quantity of plaster; enough—it will stop the escape of gas. Wait awhile, until the plaster sown becomes saturated with the gas, and it will again begin to escape. Put on plaster again, and it will stop; and so on until all the ammonia is taken up and fixed.

"Take Peruvian guano, whose great fertilizing property is ammonia, mix plaster with it in proper quantity, and it will become inodorous. And so of any other animal or vegetable manure which gives off ammonia.

"Great losses are sustained in stables, in cess-pools, in all animal and vegetable manures, by the escape of ammonia, which constitutes by far the richest part of all manures. Plaster of Paris may be most profitably employed in fixing this volatile and most valuable ingredient, to the great profit of the farmer and the public."

JOSEPH HARRIS ON WEEDS.

A weed is a plant growing where you do not want it to grow. Thistles are not weeds when grown, as they are in France, to make perfume. The thistles growing in the Deacon's wheat are weeds. He does not want them there. If you have six plants of corn in a hill where you only want four, two of them are weeds. A dead weed is not a weed. A growing weed pumps up water out of the ground. The weeds in an acre of the Deacon's clover pump up more water in a day than all his animals drink in a month. Weeds propagate faster than rats. I have got more rats than the Deacon, but the Deacon beats me on weeds. The boys shoot the rats. Yesterday they shot two and scared away a dozen. Next year they will come back again. The Deacon kills a hundred of his weeds and buries a thousand. Next Spring they will come up by the million. You can't get rid of weeds unless you kill them. If you do not kill them they will kill you. They are worse than foot-rot in sheep. They spread faster than caterpillars on currant bushes, or than the canker-worms on apple trees. Some of the orchards in this neighborhood look as though they had been sprinkled over with kerosene and set fire to. The worms have eaten off every leaf. Some farmers keep off the insects by putting tar bands round the trunks of the trees in Spring; some don't. They think it is no use fighting the worms. Some farmers think it is no use killing the weeds. It is natural for the soil to produce weeds. They say you can't kill them. The Deacon does not say weeds can't be killed, but he does not try to kill them. He hoes his corn. I don't hoe my corn. I hoe the weeds. I would kill the weeds if there was no corn. I am not sure that the Deacon would. The Deacon never Summer fallows. He never Fall fallows. He never tries to make the weeds grow. He tries to smother them up for a few months. He does not kill the roots. He does not make the weed seeds grow and then kill the young plants. The weeds on his farm are getting worse and worse. My farm used to be worse than his; now some of it is cleaner than his. I am fighting the weeds. He lets them grow, and is waiting for something to turn up. There are thousands of farmers doing the same thing. The weeds cost us more than all our State, national, and local taxes; more than all our schools, churches and newspapers. They are more expensive than children's boots and ladies' bonnets. They are as bad as cigars and fast horses. The horse may break his neck, and you will get rid of him; but the weeds will stick tighter than a mortgage, and run up faster than compound interest or a grocery bill. They are like bad habits. You must not tamper with them. No half-way measures will answer. The only way to stop using tobacco is to stop. The only way to kill weeds is to kill them. I hope the old gentleman will be pleased with my "composition." I hope when he visits this neighborhood again he will find fewer weeds. Land worth \$150 per acre ought to produce something better than thistles, red-root, quack-grass and chess.—*Amer. Agriculturist.*

TOBACCO CULTURE.

PRIMING TOBACCO.

J. C. Smith, of Dinwiddie County, Va., writing to the *Rural Messenger*, says:

"Does it pay to prime tobacco, or rather does it benefit the crop any at all to prime it? This is a question that I would like for some experienced tobacco grower to discuss. I made my first crop of tobacco last year, and although I had heard the idea advanced that priming was more the observance of an old custom than an actual necessity—a custom instituted during the days of slavery to make work for idle hands to do—yet I deemed it prudent to conform to the practice of the most successful tobacco growers of my own section. I think that if there is no actual benefit to be derived from it, that it is a practice that should be abolished, for in these times the farmer has use for all his resources, without making any unnecessary work simply because it was his father's rule. I do not mean to advance the idea, however, that it is a useless custom, for I have no experience with the crop save what little I picked up last year, and only write for information.

"I will continue to practice the old rule until I am satisfied about the matter, but will try an experiment on a small scale in regard to it this season.

"As to saving the primings, would it not pay better to leave them on the hill, and when earthing up the tobacco cover them and allow them to rot? Would they not add something by way of fertilizing material to the soil, and make the plant enough heavier to compensate for the loss of primings? Would like to hear from some of your able correspondents on the subject."

NOTES BY THE EDITORS MARYLAND FARMER.

If tobacco be cut and housed before there is time for the "succors" to grow over four inches long, it is possible that succoring may not be necessary, but it is apt to cause the tobacco to be heated and rot at the point where the leaf attaches to the stalk. If by "priming" is meant what planters recognize technically as the pulling off the "ground-leaves," we must say that, at the present day, we do not think it pays. Once was the time when old men and women and small negro slave girls and boys went through the fields and saved ground-leaf and tied it up; and, when dry, it was packed and brought a good price. But of late years the prices for ground-leaf have ruled low; and, labor being scarce and high, it does not pay to secure it. The leaves, being left

on the stalk, we do not think are at all disadvantageous to the growth of the plant. It is usual in Virginia and Connecticut to "prime" the tobacco when they "succeed," but leave the primings on the land like succors. Possibly, if covered up with dirt, they might act as a fertilizer.

THE TOBACCO FLY AND COBALT.

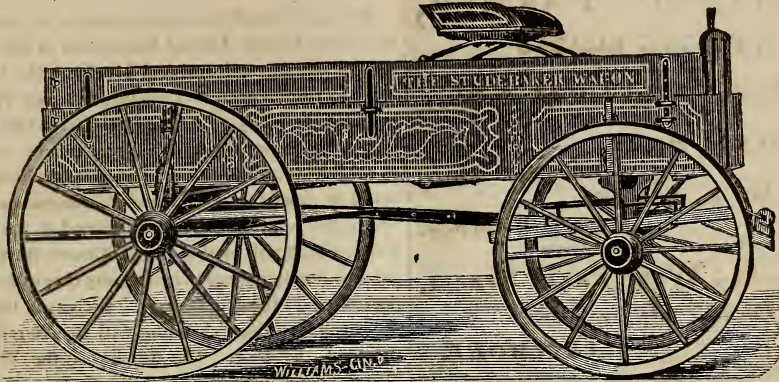
Thomas Whitworth, of Mayfield, Dinwiddie County, Va., writing to the *Petersburg Rural Messenger*, says:

"At his plantation, known as 'Levedeox,' lying on Hatcher's run, ten miles from Petersburg, Mr. Henry Chamberlayne Wilson has, for the last five years, been using cobalt to protect his tobacco from the ravages of the horn-worm, by destroying the tobacco fly. His efforts have proved eminently successful, and especially so the present year, because the application of the poison has been more diligently and perseveringly made than in any previous year. In a field of about sixty thousand hills, now generally in the top, it is difficult to find a leaf perforated by the worm.

"Mr. Wilson's method of preparing it is to put about half a gill of cobalt in a common black quart bottle, fill it with water, sweeten so much as to make it attractive to the fly, and insert a quill in the cork with which the bottle is stopped, so that a drop or two may be deposited in any flower the fly may frequent. They seem to have a peculiar fondness for the flower of the Jamestown weed, and it has long been my opinion that if the practice could become general amongst tobacco planters and cultivators of truck of growing the Jamestown weed around or in the vicinity of their several crops, this entire family of depredators might easily be exterminated. Furthermore, if each tiller of the soil would inform himself of the habits of crop-destroying insects, much that is now lost might be saved; especially if birds, instead of being destroyed, were cherished and allowed to multiply."

COBALT AND TOBACCO FLIES.—The *Lancaster News* says: "Mr. A. B. Brown, a citizen of this county, brought to town last week about fifty tobacco flies he had picked up under one tree on his place. He had poisoned the blossoms of the Jamestown weed the evening previous, with a drop or two of cobalt, which had killed thousands of these insects which are so destructive to tobacco. They are said to be more numerous this year than ever before."

THE CELEBRATED STUDEBAKER WAGON.



We present above an engraving of this celebrated Wagon for which E. Whitman & Sons, of Baltimore, are sole agents. It is known and appreciated in nearly every State and Territory, and such has been its success, such its popularity—on the farm, on the plantation, on the great plains, and in the mountain districts of the West—that many have attempted to imitate its proportion, style and workmanship. But in this they have failed. The substantial qualities of these wagons, lightness of draft, strength and durability have never been excelled—never equalled. The variety of their work is great, and suited to the wants of every locality. Their wheels, the most essential part of a vehicle, are very superior. Experience and the severest tests, as well as theory, have proved beyond a doubt that the Slope Shouldered Spoke is stronger, more durable, and every way better than any other, and this they use exclusively.

These Wagons are manufactured at the colossal works of STUDEBAKER BROS., at South Bend, Indiana, where, by the aid of greatly improved machinery, a complete wagon can be turned out every ten minutes.

INCOME FROM FIFTY FOUR ACRES.

M. W. Clark, of Derby, Erie Co., New York, in the *Live Stock Journal*, gives the following as evidence that "farming does pay":—As it has become fashionable lately to show "how farming don't pay," I will endeavor to take the cheerful side of the question and show how my small farm does pay reasonably well. The sales from my farm of fifty-four acres in 1872 were as follows:

Potatoes.....	\$108.21	Butter.....	\$35.10
String beans.....	21.99	Eggs.....	12.92
Cabbage.....	95.25	Berries.....	17.94
Pie-Plant.....	133.74	Radishes.....	91.32
Tomatoes.....	342.24	Squash.....	34.40
Sweet corn.....	37.21	Melons.....	45.04
Five calves.....	37.00	Three pigs.....	15.00
Miscellaneous.....	131.43		
Total.....			\$1,158.79

The whole farm and household expenses were \$523.09, which deducted from the amount of sales, leaves \$635.70 clear, besides what was consumed on the farm of which we kept no account. This is 12½ per cent. on which I estimate the capital \$5,000. I think the amount consumed on the farm quite equal to the manual labor I performed, and that the above must be considered a clear income. Many farmers who consume in the family, perhaps \$1,000, make no account of this and give the farm no credit, but if they had it to buy, would be astonished at the amount. A part of my expenses charged—for manures and glass for hot beds—is not consumed in one year, and a portion might therefore, properly be carried to another year's account.

A WORD OF PROTEST FROM A FARMER.

The following sensible remarks of a correspondent, we copy from the *Country Gentleman*, on the much mooted question—will farming pay?

"It has often been a cause of regret to me, in looking over the different agricultural papers, to see so many complaints from farmers in relation to their business not paying. And then we quote or point to the merchant as an example of prosperity compared with ourselves, little thinking that if they published their complaints as freely, we should find their papers and magazines overrun with accounts of failures. It is with farming as with everything else, *not the business that makes the man, but the man the business*. Farmers, as a class, try to do too much. It is one thing putting in a crop, and another taking care of it. I think that if we were to give the thought and labor to the different crops which they demand, our complaints would be far fewer than they are. All the Patrons of Husbandry, all the clubs, all the agricultural papers in the country, will not help us, if we do not try and help ourselves. So far as I have observed, those who do the most grumbling, do the least work and thinking."

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THE
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 A STANDARD MAGAZINE

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 Correspondent and Agent

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OUR GENERAL CORRESPONDENT.

The rapid increase of our subscription list and advertising patronage, with a general enlargement of our business and correspondence, has induced us to assign that special department to the superintendence of T. C. DORSEY, Esq., who has been connected with our establishment for some time. This arrangement will enable us to have the advertising and subscription departments attended to with greater promptness and satisfaction. Mr. DORSEY is eminently qualified by experience and tact to discharge the arduous duties which he has assumed with great fidelity and accuracy, we therefore commend him to our friends and the public.

MARYLAND STATE FAIR.

We again briefly call the attention of our readers to the Fourth Annual Exhibition of the Maryland State Agricultural and Mechanical Association to commence on Tuesday, October 7th, and continue four days. As we stated in our last number, every thing indicates a great success, both as to exhibition and visitors. Preparations have been made in ample time to avoid confusion and disorder, the result of experience gained at the recent Fairs, which will enable the gentlemen having the present one in charge to rectify any inconveniences presented on those occasions. Increased facilities for attending the exhibition will be offered over those of the past. The tracks of the Western Maryland railroad will land passengers within half a mile of the Fair grounds, while the cars of the Baltimore, Pimlico and Pikesville railroad will halt within three squares of the south fence of the show-grounds, where an entrance to the enclosure has been made. Extra trains will be run over the Western Maryland railroad during the continuance of the Fair, and a sufficient number of cars placed on the Baltimore, Pimlico and Pikesville horse railway to meet all demands.

Passengers by this route can reach the Fair grounds by taking the cars of the Madison and Pennsylvania avenue routes and the Citizens' line. After leaving these lines they will take the Park cars, and after alighting in the park, visitors to the show will have but a short walk before them before reaching the cars for the Fair grounds. The Northern Central railway will also run excursion trains to Mount Washington, where omnibuses and other vehicles will be in readiness to convey passengers to the Fair.

Another feature will be found in the exhibition of a valuable array of fancy poultry and pigeons by the Maryland State Poultry Association of Baltimore. This portion of the exhibition will be placed in floral hail. The Agricultural Society has appropriated \$600 as premiums for this department.

For the list of premiums, &c., we refer our readers to the August number of the *Maryland Farmer*. It is to be hoped that no apathy on the part of those most interested will cause the Fair of 1873 to be other than a complete and gratifying success, and that the efforts of the gentlemen who control it will be heartily aided and seconded by the farmers and breeders throughout the State.

CUT FOOD is certainly more economical than uncut. Whether it is healthier or otherwise depends much on whether the horses are allowed to rest after eating.

BALTIMORE COUNTY FARMER'S UNION.

A mass meeting of the "Farmer's Union" of Baltimore county, and Ladie's Basket Pic-Nic, took place at Cockey's celebrated camp-ground, on the 11th of September. A thousand persons, including ladies, gentlemen and children were present. In acceptance of the polite invitation of the managers, the *Maryland Farmer* was present, in the person of its Editors and their families, and enjoyed hugely the scene and all its accompaniments. The day was fine, the primeval forest furnished a velvet turf and dense shade, with the clearest and coolest of water—other drinks not being allowed—a capital hint for other like Clubs to consider.

The stand was beautifully decorated with the finest products of the fields, the orchard and the garden, intertwined with lovely flowers. The *tout ensemble* presented one of the prettiest and most interesting rural scenes we ever remember to have beheld. The whole procedure was one reflecting high honor upon the "Farmers' Union."

At 11 o'clock the President, S. M. Rankin, Esq., called the meeting to order, with some appropriate and interesting practical remarks. He was followed by D. Lawrence, Esq., from Howard county, the orator of the day. As his oration will be published in our columns, we need make no other comment than that its worth was enhanced by his earnestness and zealous manner, showing his heart was in the cause. It will be read with as much pleasure and instruction by a host of farmers, as his many communications to the *Maryland Farmer* under different soubriquets have been for years past.

L. L. Conrad, Esq. then delivered a practical and impressive address, which we regret to have not been furnished for publication. After these intellectual exercises the President announced a committee to meet the *Washington County Agricultural Club* on the 17th of September, at Druid Hill Park. The Committee consists of Messrs. S. M. Rankin, John D. Matthews, Dickinson Gorsuch, Edwin Scott, Dr. Moses Merryman, William Webster, Thomas C. Bosley, John Piersol, N. T. Hutchins, B. McLean Hardesty, George Jessup, and John Mason. He then announced a recess, during which the whole crowd was invited by the Union to take lemonade and ice cream, and enjoy the contents of the individual baskets, that were seen at short distances over the ground, near which grave matrons and fair daughters of Baltimore county spread table-cloths on the grass and served gracefully to their friends and strangers the viands they had provided.

This was a peculiarly interesting and novel scene. Every variety of food—hams, lamb, choice saddles of Shropshire and Down mutton, poultry of every sort, beautiful bread and butter, cut and spread by the prettiest and snowiest of hands; pickles and cakes and pies in masses; the finest of vegetables and fruits—the largest and best of canteloupes were sliced and irresistably pressed upon our already overburthened appetite. We hardly know which to admire most, the manly forms and sturdy earnestness of the yeomanry in their intellectual interchange of opinions, as the interests of their great cause, or the treat of good things offered with such graceful hospitality by the ladies. Both were in their way such that Baltimore county may be proud of her sons and daughters, and feel that she has, so far, no equal in the Farmers' Clubs in her sister counties. It was a glorious day for Baltimore county.

After this delightful repast, the younger portion of the assemblage enjoyed the dance on a large plank floor, to the measure of delightful music.

The general management was under the control of the Committee of Reception, composed of the following Baltimore county farmers: Messrs. Samuel M. Rankin, the President, A. T. Love, Henry N. Merryman, Edward S. Pearce, Edwin Scott, Wm. Carroll, Edw. H. Mathews, Dr. Moses Merryman, Geo. H. Merryman, Dennis M. Matthews, John Mason, John Crowther, Charles Street of R., Alfred J. Gent, Wm. Webster, N. T. Hutchins, Henry Kellogg, B. McLean Hardesty, Thos. Gorsuch, N. Bosley Merryman, John Piersol, Jas. Attlee, George Harryman, Geo. Jessup.

We spent a happy day, and left with regret that such pleasures could not live away; and the earnest hope that the "Farmers' Union" may continue to prosper until the great aim is accomplished, which is the honest one of placing agriculture in the front rank of all other great industrial pursuits in the country.

 THOMAS' SMOOTHING HARROW.

A correspondent writing from Mitchelville, Md. gives the following endorsement of this valuable implement, which the past season met with so ready a sale:

"I purchased of Messrs. E. Whitman & Sons one of 'Thomas' Smoothing Harrows,' and after a thorough trial, both in working corn (in a young state) and smoothing the land for the reception of seed, I can add my testimony to that of the many who have tried it before me, that it is without a rival. It is certainly the best implement in existence for the purposes for which it is intended,

WASHINGTON COUNTY FARMER'S CLUB IN COUNCIL IN DRUID HILL PARK.

We deeply regret that we were misled as to the day of meeting, by two of our large daily papers, and made such appointments as could not be put off, expecting to be among the spectators on Saturday the 20th of September. When too late, we were informed on the 17th, that the two great Farmer's Clubs of Washington and Baltimore Counties would meet that day in the Park, to exchange friendly greetings and interchange cordial views in regard to the best methods of advancing their interests and the general progress of Agriculture. It must have been a noble sight to see such a host of Farmers from the mountains and low-lands, hills and vales of the northern portion of our Western Shore, harmonizing and fraternizing under the lofty trees, the green slopes, beside the lakes and the eminences of that lovely retreat, where prodigal nature has been aided by the highest art, for the delight and healthful enjoyment of the whole population of our growing city—the boast of every Marylander. Our chief regret is that we lost the intellectual feast offered by COL. A. K. STAKE, in his well conceived and eloquent Essay on Farmer's Clubs. It is admirable no less for beauty of language, than its elevated and sound sentiments. We regret our space is not sufficient to give it in full to our readers this number, but will present it in our November issue.

We are happy to hear that there will be two more Re-unions of these clubs during the present year—one in Washington county and the other on the 6th December at Cockeysville, Baltimore county. May we be there to see, and hear and enjoy!

ACKNOWLEDGMENT.

Our thanks are due to B. D. Mullikin, Esq., of Prince George's County, for handsome specimens of the product of his pear orchard. They evidence the peculiar adaptation of the soil and climate of Southern Maryland for the production of the fine fruits. No finer fruit region is to be found within the limits of our republic. If the people of these counties were to pay more attention to fruit and wine-making, we have no doubt it would be greatly better for their pecuniary interest, as it would not necessarily interfere with their other farming operations. The same amount of tobacco, wheat and corn could be grown, and on the same farm, five hundred gallons of wine made, and barrels of fine pears and other fruits sent to market, from the sale of which, hundreds of dollars might be added to the gross receipts per annum.

MARYLAND INSTITUTE EXPOSITION.

Will hold its Twenty-sixth annual *Exposition* at the Hall of the Institute, in Baltimore, commencing on the first and ending on the thirty-first of October, 1873. More than ordinary pains have been taken to make the coming exhibition more popular than, if possible, that of last year, which gave such universal satisfaction to the public, and was so highly creditable to the managers of the Institution. As it will be open until 10 o'clock at night, during the meeting of the State Fair, and also of the meeting of the Maryland Jockey Club. We would suggest to our friends from the country, who may visit the city to attend those meetings, that they should not fail to visit the Maryland Institute, and witness the beautiful display of articles of various kinds, rare, curious, ingenious, costly, and useful; besides the exhibition of beautiful machinery in full operation, doing wonderful work. To such as have never seen such an exhibition, it will be perhaps the most interesting place they could visit during their sojourn in the city.

MARYLAND AGRICULTURAL COLLEGE.

The regular quarterly meeting of the Board of Trustees was held on 12th of September at the college. There were present President Davis, Governor White, Professor Newell and Messrs. McHenry, Dodge and Whitman. A dispatch from General Sam. Jones, dated August 28th, was communicated to the board, containing his acceptance of the office of president. Tuition fees were abolished, and the college declared free to all young men in Maryland of good character and possessing the requisite scholastic qualifications. Boarding was fixed at two hundred dollars a year. After the transaction of some other business of a routine character, the board adjourned to meet at State Normal School on the 17th September in the city of Baltimore, upon which day in accordance with adjournment, they met and received the new President, and after a general consultation and interview adjourned to meet at call.

CO-OPERATION IN ILLINOIS.—The farmers of Campaign county, Illinois, have put their theories and co-operative plans into practice. Having obtained a license from the State to act in a corporate capacity, they have clubbed together and recently sent nineteen car-loads of corn to market on their own account, and by this operation they expect to save \$500. It is stated they intend to forward their whole crop in this way. We shall note the result of this co-operative movement,

CROP PROSPECTS SOUTH.

Nine out of ten of our exchanges, says the *Rural Alabamian*, of September, speak favorably of the probable turnout of the growing crops. Cotton has come forward surprisingly during the last month under the influences of dryer weather, and promises, notwithstanding the great hue-and-cry of "worm" and "rain," to be the largest crop since the war—certainly as large as that of last year.—Corn has yielded well, and aggregates, no doubt, largely above an average; while of peas and potatoes, of small grain and grass, there was rarely ever so heavy a crop, past, present and prospective.

There have been a few disasters in the way of worms, rains, etc., it is true, but these have only been local—not general by any means, and have not very materially affected the total result.

The New Orleans *Picayune* says: A very large area has been put in Cotton in all the Southern States, and though the planting was late and the spring very unfavorable, the crop came out wonderfully. Worms have already committed some depredations in the uplands, and there will be large losses from rot and shedding of forms in the low lands, but there is no reason at this time to believe that less than 4,000,000 bales will be gathered with a fair picking season, and under favorable circumstances more might be produced.

The Sugar crop of Louisiana is unquestionably better than last year, and a much larger yield may be expected.

The Rice product of Louisiana will be the finest in our annals. The planting was considerably increased, and the yield per acre will be far above the average. The Southern products to be marketed here, therefore, will be of larger volume than last year, and probably larger than any one since the war.

WHEAT CROP.—From information received through our exchanges and other sources, the indications are that the yield of wheat this season, generally, has been a fair one. The information from abroad indicates that the crop is but middling, both in quality and quantity. The crops are represented as short in Great Britain, France, Hungary and Russia, promising a foreign demand for all we have to spare.

SALE OF STOCK.—We hear Mr. S. T. C. Brown, of Carroll County, Md., recently sold two of his fine Devons, one to Gen. Malone, of Petersburg, Va., the other to J. H. McHenry, Esq., of Baltimore County, Md.

SALE OF BLOODED JERSEY STOCK.

On Wednesday, September 17th, the Messrs. P. H. Sullivan & Son, auctioneers, sold twenty-two head of Jersey cattle from the herd of Messrs. Jesse and James W. Tyson and Wm. Devries. The attendance was good, but the prices ruled exceedingly low. The whole amount realized by the sale was \$1,739.50. Three of the cattle only sold for more than \$100, the highest price paid was \$155, Mr. A. B. Holton, of Aberdeen, Md., being the purchaser. The following are the prices and names of purchasers:

To W. M. Snyder, West Va., cows Ceres, \$75; Betty, \$105.

To A. B. Holton, of Aberdeen, Md., cow Ettie, \$155; Bull Nestor, \$105.

To Gen. Shriver, Md., cows Nan, \$90; Myrtle, \$150; Connie, \$100; Buttercup 2d, \$80; Daisy, heifer, \$35;—Bull Dundreary, \$40.

To R. M. Speiler, cows Pauline, \$87; Lolù Flirt, \$75; Abigail, \$65; Bull Kaiser, \$37.50.

To Mr. Baugher, cows Lettie, \$50; Mab, \$100; Leda, \$55; Hetty, \$95; Chili, \$67.50.

To Mr. Mordica, cow Daisy, \$70.

To Mr. Fryer, grade heifer, Jenny, \$47.50.

To J. C. Smith, Bull calf Czar, 18 months old, \$40.

To Mr. Gunther, Kaiser, 1 year old, \$27.50.

To Mr. Phillips, bull Vulcan, \$25; bull calf Stockton, \$20.

To Mr. Williams, bull calf, John Randolph, \$20; bull Wade Hampton, \$35.

DEATH OF SHORT-HORN ROYAL BRITON.

From the *Country Gentleman*, of September 11th, we clip the following: A year or so ago, in speaking of Mr. Coffin's [of Muirkirk, Prince George's Co., Md.] herd of Short-Horns, we mentioned his unusual number of breeding bulls for a moderate herd, and all good ones of their sort, namely, Royal Briton, Lord Abraham, Lord Mayor and 6th Earl of Oxford—the first pure Booth; the second mainly Booth; the third of the Princess tribe, and the last of the Bates' Oxford family. The 6th Earl died last October, and a few days ago pneumonia took off Royal Briton. Both were severe losses in money value, and more in their individual excellence, for 6th Earl was a splendid specimen of a Bates bull, and Royal Briton an equally good Booth. He was bred by Thos. C. Booth, Warlaby, Eng., and traces through the best blood of that world-renowned herd. He was imported, a calf, by Hon. S. Campbell, who used him moderately until sold at 3 years to Mr. Coffin; so he was just at the height of his usefulness. Fortunately Mr. C. has the largest part of his cows in calf by Royal Briton, and he will thus quite certainly get a return for the original outlay, large though it was.

TO OUR FRIENDS.

We appeal to our friends all over the country to exert their influence in our behalf by presenting the claims of THE MARYLAND FARMER to their neighbors, and inducing them to become subscribers for the year 1874. The new volume will commence January 1st, 1874, and we promise not to abate our labors to make it more acceptable even than the present year, which we flatter ourselves, compares favorably with any similar agricultural magazine in the country. There are hundreds of farmers in and out of our State who are not now subscribing to any magazine devoted to agriculture and its kindred sciences, but who could easily be induced to do so, if the character of our monthly was properly presented to them. We ask the kind offices of our old friends in securing each a *new* subscriber to our volume for 1874. Single copies \$1.50, five or more copies \$1 each.

 RENNET.

From a very exhaustive article on Rennet, by L. B. Arnold, editor of the Dairy Department of the *Canada Farmer*, we extract for the benefit of our readers, who may not be familiar with the subject, the following definition of Rennet:

The dried stomach of the calf, the pig, and the lamb may be included in the definition of the term "rennet," these being the only stomachs here used in cheese-making that we are aware of. The stomach of the calf is the main dependence for curdling milk for cheese, but that of the pig has sometimes been substituted with good effect. The stomach of the lamb makes a very fine flavored cheese, but is weak compared with the others, and is little used.

The mode of preparing and preserving the stomach, and age of the animal from which it is taken, exert a marked influence on the characteristics of the cheese made with it. The rennet of the young calf makes a soft rich cheese; that of the full grown animal makes a hard and dry one, and between these extremes the effect varies according to the age of the animal. The stomach of the calf four days old makes a softer cheese than when four weeks old, and very much softer than when four months old. That age is best at which it will make the most cheese, and that is when one week old or less. It is often supposed that the rennet of a calf four to six weeks old, because it is larger, will curdle more milk than a younger one, but experience has proved otherwise. With the pig it is different. The stomach of the pig is good from three to six months old, or even a year. The stomach of the lamb appears to be effected the same as the calf. Our experiments with lamb's rennet have not been extensive enough to determine its efficiency at all ages, but in those made, the younger the animal the better the effect. The stomach of the calf loses its power and quality very rapidly as soon as it begins to eat solid food, and that of the lamb probably does the same.

PARIS GREEN—STRIPED BUGS, &c.

We clip the following from the *Nashville Union*, which was reported by a correspondent of that paper:

Having occasion to use Paris Green and calcined plaster, in the proportion of one of the former to fifteen of the latter, as a destroyer of the potato bug, I tried the stuff on squash, melon and cucumber vines; with me, the mixture dusted on from a common dredging, has proved equally effectual against the Colorado potato beetle and the striped bug.

On squashes of the tenderest variety foliage, like the Hubbard, for instance, and on the hardier, like Cymlin and the Winter Crookneck, this mixture, whether put on while the plant is wet or dry, does not injure them; and so of muskmelons and cucumbers. The watermelon, however does not like to be so treated, but I would recommend that the mixture be used with care.

We also see by a Western exchange that Paris Green has been used successfully as an antidote to the new scourge called Blister Fly, which has been ravaging the potato patches of the Western farmers. It is said this new Fly has a strong partiality for polato plants, and will devour a patch with alacrity.

From a letter addressed to G. & N. Popplein, Jr., of this city, by Burr & Bates, of Willoughby, Ohio, in reply to an enquiry seeking information relative to the use of Paris Green, in killing the Colorado Beetle, &c., we are permitted to extract the following:

"We give you all the information we can. In the first place as to quantity, some use 1 pound Pure Green to 60 pounds Sand Plaster, others have used as high as 100 pounds Sand Plaster to 1 of Green, and assert with that large adulteration, it killed the bug; others used with water, but that was abandoned as it was too much work to carry so much water.

Farmers claim that the plaster benefits the potatoes all that it costs, so the expense is only the Green and the labor of putting it on. In putting it on, all kinds of "contrivances" are used, one of the best is to take a tin basin that will hold say three or four quarts, put fine sieving in the bottom, fasten it to a handle two feet long and then give it a shake or two on each hill; in this way a man can use it as fast as he can walk. The Green is to be thoroughly mixed with the plaster. If it is used as soon as the beetle makes its appearance in the spring, before they have time to lay their eggs, it is easier to keep them off the balance of the season. We have had a very wet season, and it has required more Green and labor to keep down the bugs, than it would in an ordinary summer,—farmers that have not "grown weary in well doing" will have a good crop of potatoes."

For the Maryland Farmer.

PEOPLE WHO MAKE FARMING PAY.

There is so much unprofitable farming throughout the land, North and South, and, generally, the gains of apparently successful culture are so moderate, we need not be surprised that young men are unwilling to stay on the farm; and that all who take a shallow view of the matter, are ready to utter the well worn saying, "farming does not pay."

That it *does* pay *some* people, there can be no reasonable doubt; and it is as certain, too, that those who find it profitable are those who *make* it so. It is mere confession of ignorance or weakness when a man says he cannot make his farming pay. He does not *know* how to command success, having all necessary means and appliances; or, not having these, his knowledge cannot be made available. When we blame the business of farming for what is in fact our own short-comings, it is the same human weakness that old Cassius spoke of to his friend:

"The fault, dear Brutus, is not in our Stars,
But in ourselves, that we are underlings."

Mr. Webster, when it was suggested that the profession of law was very much crowded, replied, there was "room enough in the upper-story." It is so in farming. We have no more "underlings," I suppose, than are found in other pursuits, and it would be more manful, when we do not succeed, not to throw the discredit upon farming, but to acknowledge that we have not yet got into the "upper-story."

I have been interested lately, in reading some account of the doings of two of our "upper-story" people—one North and one South—Mr. Joseph Harris, near Rochester, New York, and Mr. David Dickson, near Sparta, Georgia. Mr. Harris is the well-known contributor of "Walks and Talks," in the *American Agriculturist*, and is, perhaps, the most popular of our agricultural writers; and Mr. Dickson is as well known, especially throughout the South, as the most successful cotton planter, and may we not say, if not the very first of American agriculturists.

MR. JOSEPH HARRIS.

The editor of the *Country Gentleman*, having lately visited "Moreton Farm," the residence of Mr. Harris, says: "It has been owned and occupied by him about ten years. When he first took possession, it was in a wretchedly neglected and run-down condition. With so much to be done in the way of improvement, he has not yet reduced it to so perfect a condition as to enable him to adopt throughout a regular rotation, &c." Un-

derdraining, about seven miles of which have been constructed; constant war upon weeds, "a remarkably dense and satisfactory crop of clover," root crops for stock, Cotswold sheep and Essex pigs sold for breeders, "a Northern spy orchard of 220 trees," are some leading points in Mr. Harris' farm economy. After giving the sales of Essex pigs for last year, amounting to \$4,000, the editor of the *Country Gentleman* continues: "On the whole, the farming at Moreton appears to be quite successful. The profits, other than from the sale of pigs, are a fair return from the land; and the constant increase in the value of the farm is, by no means, to be overlooked. It was bought at a comparatively low price, in a run-down condition, and with the improvements has cost \$80 per acre, or \$22,000 for the farm, (285 acres.) It is fairly estimated, according to the price of adjoining land, at \$150 per acre, or over \$40,000."

Here seems to be a fair show of success, and it is plain from the statement, and from what we know otherwise of Mr. Harris, that it is not because "farming pays," but because he has *made* it pay. He is an aggressive farmer, for we are told he "makes war against the weeds." He armed himself in the onset with knowledge, scientific knowledge, as well as experimental. "He has reduced to practice the principles which he had adopted after assisting in the celebrated experiments of Messrs. Lewis and Gilbert, at Rothamsted, England, in connection with many years of experience in this country." In a proper knowledge of his business, is included that of the necessary means and appliances for its prosecution. In having "adopted" right principles, and "reduced to practice" what he had learned, he has exercised that good "common-sense," necessary alike to the soldier and the farmer, and he has conquered success.

In the September number of the *Agriculturist*, Mr. Harris says of himself, he is not a "high farmer." Where land is worth \$250 to 500 per acre, high farming is the only farming that will pay; but what he advocates is "good farming," and this, he thinks, "is applicable anywhere and everywhere." "I want to drain all land that needs draining—at least all land that is under cultivation—I want to cultivate the land thoroughly; I want to get the weeds under control; I want to allow no weeds to go to seed; and I want to cause the weed seeds already in the ground to germinate, and then I want to kill the young plants. Then, too, I want to make good manure, and a good deal of it; the richer it is, and the larger the pile, the better it will please me. This is my agricultural platform."

MR. DAVID DICKSON.

A year ago, the editor of the *Rural Carolinian* gave a sketch of Mr. David Dickson and his planting, which may be found in the October number of that journal. "In 1846," he says, "having finally closed his mercantile business and made all the necessary preparations, Mr. Dickson returned to the place where he was born—his father's old homestead—and commenced farming with a capital of \$25,000, acquired in trade. When the war broke out, his property was valued at \$500,000, all made in planting. His plantation in Hancock and Washington counties, comprises about 15,000 acres, and he owns another of 13,000 acres in Texas."

Mr. Dickson, too, has conquered a success, which is simply astonishing to the man who is wondering whether "farming will pay." The editor found cotton that promised a yield of two bales to the acre, growing "on what people are pleased to call a 'pine-barren'—not fresh pine-barren either, but land that has been under cultivation for *seventy years*, and was so poor and worn out when Mr. Dickson bought it, that no one else would have it at any price." "His corn crop never fails. No drought burns it up. 'I can tell in the spring,' Mr. Dickson said, 'where the *dry streak* will fall in summer. It always follows the bad farming! The '*dry streak*' never falls on his cornfield.'"

The principal points in his system, are, 1st. A deep and thorough preparation of the soil. 2d. The liberal use of manures. 3d. Level and shallow cultivation. 4th. Rotation of crops. 5th. Economy of labor." "Knowing that manure, judiciously applied will pay, he uses it *freely*. In the first place, he returns everything to the land (after being eaten or used) which he has taken from it, except the lint of the cotton, and in addition gathers leaves, pine-straw, and the scrapings of swamps, and digs muck to spread in his stock yard and to scatter broadcast on his fields. Then he makes up the required amount of the fertilizing elements, by the application of a concentrated compound composed of Peruvian guano, dissolved bones, common salt, and land plaster, in equal proportions by weight, mixing the ingredients himself. Of this compound, he has used this season about 800 pounds to the acre, at a cost, probably, of not far from \$25 per acre."

Mr. Dickson is not an educated man, as the expression is commonly understood. "His educational advantages were quite limited; but his clear, comprehensive intellect, his close observation, and the best use of his opportunities for reading and

study, have enabled him to acquire a stock of practical knowledge such as few, with better early advantages, can boast." "He inherited from his parents, an excellent constitution, and a strong, well-balanced brain—a sound mind in a healthy body. Beyond this he received little, his share of the paternal property amounting to only \$1,200."

With such advantages as these facts indicate, with the training to business habits acquired in active commercial life, but without any special preparation for the pursuit of agriculture, beyond what he had learned from books, Mr. Dickson began his career as a planter at the age of thirty-five. We do not suppose that the question, whether farming would pay, ever presented itself to him. He made up his mind that it *should pay*, and it *has paid*.

It is worth while to note, in these times of shoddy pretension and extravagance, the pleasing coincidence as to style of living of these two representative agriculturists, one of the North, and the other of the South. One editor says, "I met Mr. Dickson at the house—a very modest cottage, such as you may see on many a small farm in Georgia or South Carolina, with nothing remarkable or pretentious about it in any way—everything for use and comfort and nothing for show, is evidently the rule. The farm buildings and negro quarters are more likely to attract attention than the dwelling, as they are decidedly better than are usually seen." The other says, "Mr. Harris occupies the dwelling which he found on the place, lives as a comfortable country resident, enjoys the products of the farm and garden, and the domestic comforts which may be gathered around a rural home."

N. B. WORTHINGTON.

TO PLOW UNDER GRASS.—The *Live Stock Farm and Fireside Journal* gives the following: Use the chain and ball to your plow. No matter what kind of a plow you have, try them. A piece of ordinary trace chain will do very well. Fasten one end of it to your colter, and to the other end attach a round iron ball of from two to three pounds weight—leaving the chain long enough to permit the ball to reach back to about the middle of your mold-board—and there let it drag along, on the off side of the course.

This is not a new idea—in fact it is a very old one—but, like good wine, age only improves it. Just try it once, and we have no fear of your verdict. It may not do the work to absolute perfection, but it will perform it at least fifty per cent. better than you can without it.

SALE OF SHORT-HORN CATTLE.

\$40,600 for one Cow—\$35,000 for another—total for
Herd \$380,890!!

The most remarkable sale of cattle ever made in this country took place at New York Mills, three miles from Utica, New York, on the 10th September, comprising the herd of Duchess and Oxford breeds belonging to Hon. Samuel Campbell, one of the most celebrated breeders in this country. The sale attracted the most prominent short-horn breeders of the world, including representatives from the great grazing sections of Kentucky, Illinois, Ohio, Minnesota, Canada, England, and Scotland. About five hundred people were present, including all the American breeders and the following from England: Right Hon. Lord Skelmersdale, whose seat is near Liverpool; Mr. Halfred, of Papillon Market Harbor; Mr. Calthorpe; Mr. Richardson, who represents Sir Curtis Lampson, of Sussex; Mr. Berwick, agent for Lord Dunmore, but who buys for Earl Bective, recently Lord Kenlis, of Underly Hall, Lancashire, and Mr. Kello, agent for Mr. R. Pavin Davis, of Horton, Gloucestershire; also Messrs. Cochrane, Christie Miller, and Beattie, of Canada.

The Duchess family, headed by that noble three-year old bull, Second Duke of Oneida, came first in the sale. He was no sooner presented than Lord Skelmersdale offered \$10,000. This was quickly followed by offers of \$11,000 and \$12,000, and he was sold to Mr. Thomas J. Megibben, of Cynthia, Ky. Next came First Duchess of Oneida. The bidding started at \$15,000 and quickly ran up to \$30,000, after which bids of \$100 more were made until she was sold to Lord Skelmersdale for \$30,600. A beautiful yearling, Seventh Duchess of Oneida, was next offered. The bids started at \$5,000 and quickly went up to \$19,000, at which sum she was sold to Mr. A. J. Alexander, of Kentucky. After her the Tenth Duchess of Geneva came into the ring. The bidding starting at \$500, ran quickly up to 30,000, and then, by smaller bids, at 35,000, at which she was taken by Lord Bective, through Mr. Berwick. Several fine animals followed at high prices, some to cross the Atlantic.

The culmination of the intense interest, however, was reached in the bidding for the Eighth Duchess of Geneva, which was sold to Mr. R. Pavin Davis, of Gloucestershire, England, for the unprecedented sum of \$40,600. After this eleven cows of the Duchess family sold for \$238,800, an average of over \$21,700. Of these, six went to England at a cost of \$147,100, and five remain here at a cost of \$91,700.

After the Duchess family came the Oxfords, then the other families, the bulls being brought in after all the cows were sold. There were in all one hundred and eleven animals presented. The sum realized was \$380,890. The Duchess herd was originally from England, imported in 1853, and kept in perfect purity in Duchess county, New York. For some years many young animals, both male and female, have been sold back to England.

LIST OF PRICES AND PURCHASERS.

The following is a complete list of the blooded stock sold by Mr. Campbell, together with the names of purchasers and prices paid:—

Mazurka 9th, W. S. King, Minn.....	\$600
Lady Newham 2d, James Mix, Ill.....	205
Wild Flower, B. Groom, Ky.....	400
8th Duchess of Thornsedale, C. W. Wadsworth, N. Y.....	450
2d Maid of Oxford, A. W. Griswold, Vt.....	6,000
Lady Bates, C. W. Wadsworth, N. Y.....	305
Alpha, J. F. Allen, N. Y.....	300
3d Maid of Oxford, T. J. Megibben, Ky.....	1,000
7th Lady of Oxford, Ezra Cornell, N. Y.....	400
Berlinda, Caleb Heally, Pa.....	325
Rosamond 4th, James Mix, Ill.....	550
Moselle, A. W. Griswold, Vt.....	1,425
Butterfly Belle, A. W. Griswold, Vt.....	875
Fair Maid of Hope (Beef).....	90
Adaline, A. B. Cornell, N. Y.....	500
12th Duchess of Thorndale, A. B. Conger, N. Y.....	5,700
Vacuna, James Mix, Ky.....	475
8th Duchess of Geneva, R. P. Davis, Eng.....	40,600
2d Countess of Oxford, A. W. Griswold, N. Y.....	2,100
13th Duchess of Thorndale, A. C. Conger, N. Y.....	15,000
Rosamond 5th, T. J. Megibben, Ky.....	700
Empress of Acomb, David Christie, C. W.....	525
10th Duchess of Geneva, Mr. Berwick, Eng.....	35,000
Fidessa and bull calf one day old, Fisher, Ky.....	555
Bloom, Fisher, Ky.....	800
Victoria 7th, A. W. Griswold, Vt.....	1,525
Lady Bates 4th, E. G. Bedford, Ky.....	3,250
Lady Bates 8th, c. calf by 2d Duke of Oneida, out of Lady Bates 4th, three weeks old, Col. King, Minn.....	1,600
Roan Duchess, G. M. Bedford, Ky.....	1,025
Butterfly Beauty, A. W. Griswold, Vt.....	270
Arabella, A. B. Cornell, N. Y.....	425
Lady Newham, James Mix, Ky.....	250
Lady Bates 5th, G. M. Bedford, Ky.....	1,100
Baron Oxford's Beauty, Bush & Hampden, Ky.....	1,500
May Lass 2d, Hews & Richardson, Ky.....	800
Lady Knightly (beef).....	500
Araminta, B. B. Cornell, N. Y.....	1,125
Waterlily, Bush & Hampden, Ky.....	700
Rosamond 7th, W. R. Duncan, Ill.....	250
War Trophy, B. Groom, Ky.....	3,000
Lady Worchester, Mr. Halford, Eng.....	450
Bull Calf from above, Beattie, C. W.....	800
Sidonia 2d, Hews & Richardson, Ky.....	3,100
Lady Knightly 2d, E. J. Thomas, Ky.....	500
Mistress Ford, Simon Beattie, C. W.....	1,100
Cherry Constance and calf, W. S. King.....	1,700
Peri 4th, W. S. King.....	7,000
12th Lady of Oxford, Mr. Halford, Eng.....	30,600
1st Duchess of Oneida, Lord Skelmersdale, Eng.....	450
Lady Newham, James Mix, Ill.....	225
Magnolia, A. W. Griswold.....	2,000
Atlantic Gwynde, Lord Skelmersdale, Eng.....	775
Lady Newham, Hews & Richardson, Ky.....	400
Adeliza, A. B. Cornell, N. Y.....	2,508
Brenda, L. G. Morris, N. Y.....	525
Lady Valentine, J. Miles.....	15,600
3d Duchess of Oneida, Mr. Halford, Eng.....	3,100
Alpheia, A. B. Cornell, N. Y.....	3,100
Lady Worchester, 5th, Mr. Halford, Eng.....	1,000
Lady Newham, 8th, A. B. Conger, N. Y.....	9,100
3d Countess of Oxford, A. B. Conger, N. Y.....	5,000
Lady Knightly, L. G. Norris, N. Y.....	2,050
Rosamond, 10th, W. R. Duncan, Ill.....	800
Victoria, 9th, A. B. Cornell, N. Y.....	425
Araminta, A. B. Cornell, N. Y.....	1,000
White Express, Simon Beattie, C. W.....	525
Rosamond, 12th, A. W. Griswold, N. Y.....	25,000
4th Duchess of Oneida, E. G. Bedford, Ky.....	2,300
Berlinda, L. G. Norris, N. Y.....	1,000
Bloom 4th, A. B. Cornell, N. Y.....	2,300
Lady Bates 6th, G. M. Bedford, Ky.....	700
Alcyone, A. B. Cornell, N. Y.....	1,725
Beauty's Pride, A. W. Griswold, N. Y.....	1,725
Cherry Constance, W. McGibbon, Ky.....	825
Butterfly Bland, A. B. Cornell, N. Y.....	1,600
Lady Bates 7th, A. B. Cornell.....	400
Lady Newham, A. B. Cornell.....	800
Moselle, W. S. King.....	4,000
Lady Knightly 4th, A. W. Griswold.....	19,000
7th Duchess of Oneida, A. J. Alexander, Ky.....	525
Lady Newham 10th, Hews & Richardson.....	1,300
Peri, W. S. King.....	6,000
12th Maid of Oxford, L. G. Norris.....	500
Armentine, A. B. Cornell.....	15,300
8th Duchess of Oneida, Mr. Berwick.....	950
Wilda, Hews & Richardson.....	10,000
Lady Newham 11th, Hews & Richardson.....	
9th Duchess of Oneida, Mr. Berwick, Eng.....	

Victoria 10th, A. B. Cornell.....	500
10th Duchess of Onelda, A. J. Alexander	21,000
Miss Gwynne, W. S. King.....	1,700
Bloom 5th, Cassius Clay, Ky.....	900
Sidonia 4th, Hews & Richardson, Ky.....	525
Lady Newham 12th, Hews & Richardson, Ky.....	305

BULLS.

2d Duke of Onelda, T. J. Megibben, Ky.....	12,005
4th Duke of Onelda, A. B. Cornell, N. Y.....	7,600
Alderman, A. B. Cornell, N. Y.....	250
Advance, James Mix, Ill.....	180
Wild Oats, W. R. Duncan, Ill.....	160
7th Duke of Onelda, A. W. Griswold.....	4,000
Waterman, B. F. Goss, Ky.....	325
Fidalgo, W. R. Duncan, Ill.....	275
Mill Boy, Mr. Palmer, Va.....	300
Prince Alfred, Thomas Dodd.....	600
10th Earl of Oxford, A. B. Cornell, N. Y.....	25,000
Roderica, C. M. Lang, Attica, N. Y.....	200
Rufus, Professor Myers, Mich.....	350
Baron Bates 5th, A. B. Cornell, N. Y.....	525
Bright Butterfly, A. B. Cornell, N. Y.....	200
Total.....	\$481,585

For the *Maryland Farmer*.

FRENCH TRANSLATIONS.

COWS.

M. Guillemont, Professor of Agriculture of the Department of Deux-Sevres, has just published a very interesting work on milch cows, in which he says that pasturing—as distinct from stabling—has no marked influence on location, being a matter of habit. A cow produces as much milk constantly stabled, as soon as she has become accustomed to it. It is held by some, however, that the quality of the milk of a cow at large will be better, as the health of a free cow will be better than permanently stabled. It is important, in order to preserve milch cows, to draw the milk from them thoroughly; the milk which remains in the bag has a tendency to produce inflammation, swelling and the loss of a portion of, or even the whole, udder.

We do not sufficiently comprehend how important and productive it would be to have none but good cows on our farms, and to keep none but those which present these conditions. It would be advisable to take all possible measures to propagate *milch* cows. After a long array of figures, showing the number of cows in France, their value, production, etc., the article concludes: "These enormous figures merit that very serious consideration which would largely increase the agricultural riches of France. The balance sheet of our agriculture would be very brilliant, if we could give to this great industry all the development it will permit, and put in play the best conditions the immense force it has at command."

CULTIVATION OF HEMP.

Reference is made in *La Semaine Agricole* to the culture of hemp, and its cultivation is recommended to farmers in consequence of the large revenue derived from this source in France. The wealth of two Provinces, Anjou and Touraine, being largely in consequence of its production of the article.

INSPECTION OF CORN.

The following rules have been adopted by the Corn and Flour Exchange of the city of Baltimore, for the Inspection of Corn, which we publish for the benefit of those interested:

The grades of Corn from and after August 28th, 1873, shall consist of Nos. 1 and 2 White; 1 and 2 Yellow; 1 mixed; mixed; rejected and damaged. No. 1 White Corn shall be dry, sound, cleaned well, and free from grains of other color, and in every respect of choice quality.

No. 2 White Corn shall be dry, sound, reasonably clean, and may contain a limited quantity of yellow and straw-colored grains.

No. 1 Yellow Corn shall be dry, sound, well cleaned, and free from grains of any other color, and in every respect of choice quality.

No. 2 Yellow Corn shall be dry, sound, reasonably clean, and may contain a limited number of red and straw-colored grains.

No. 1 Mixed Corn shall be dry, sound, cleaned well, and in every respect of choice quality, and shall embrace all No. 1 Corn that will not inspect either White or Yellow.

Mixed Corn shall be merchantable, reasonably clean, and may contain a limited quantity of dry, unsound grains.

Rejected shall be slightly damp or slightly musty, but cool and not well cleaned.

Damaged shall be damp, warm, or inferior to quality described as rejected.

MARYLAND JOCKEY CLUB.—The Fall meeting of this Association will be held during this month at *Pimlico Fair Ground*. It is believed that it will be more largely attended than ever before owing to the greater facilities of reaching the course and the superiority of the horses that have been entered in the Stakes. "All the world and its wife" will be there to enjoy the contests. Racing has become very fashionable and enjoyable by the ladies particularly, since it has been placed upon a high level under the control of gentlemen and no longer a mere gambling avocation followed by black-legs and rowdies. Trials of speed as now controlled are highly interesting to all who appreciate the noble and beautiful animals that enter themselves fully into the spirit of the contests. It is a harmless and intensely exciting sport that none enjoy more than lovely woman.

SWEET CIDER.—The following method of preserving cider sweet is recommended as superior to any other by the *Germantown Telegraph*: "I allow the cider, after it comes from the press, to stand until the pumice settles. When this point is reached I put it in a clear vessel, and let it come to a boil, skimming off the scum carefully. It is then put into kegs or demijohns, and tightly corked and sealed. By this process I have excellent sweet cider, not merely for the entire winter, but for years. This method would not of course be available where large quantities are made, but for an ordinary family it answers admirably."

The Poultry House.

PROFITABLE POULTRY BREEDING.

I have been breeding thorough-bred poultry for the past 30 years, on a small scale, but in a painstaking and thorough manner, and my success the past season when so many have failed, warrants me in giving my experience to the readers of the *Cultivator*.

I have not had very good success since I came to Massachusetts, raising chickens, till last year, the reason, no doubt, being the soil, which here is loamy and consequently *damp*, and at my place in Vermont was dry and sandy. Last year I used hens to hatch my chicks, taking them away as fast as hatched and putting under more eggs. I set some hens 12 weeks, that were in as good condition at the end of that time, as when they began to set, but as I was obliged to skip strawberry time they had a chance to rest. I had two hens that hatched 45 chickens apiece without leaving their nests only to eat and drink, and all averaged 35 chickens apiece in 13 weeks.

I put dry earth 6 inches deep on the bottom of my sitting boxes, and if the weather was cold put a newspaper two or three double top of the dirt, then put on two or three inches of fine hay and hay chaff; set 9 to 13 eggs at a time under each hen. There is a great difference in hens about hatching; some that seem to sit very well not hatching any chickens; others break a good many eggs, and if the remainder are not washed off soon afterwards they wont hatch. The shell must be kept clean to ensure hatching. I sprinkle sulphur into the sitting nests, and among the hens' feathers once or twice a week; besides, my hens always have access to wallowing boxes.

I set 5 or 6 hens at a time, and from that to 20, getting from 8 to 11 chickens from a hen; I put 50 chickens into a cheese-box that hold a 50 lb. cheese; cut a hole in the box to let them out when they are 3 or 4 days old; covered the bottom of the boxes one inch deep with coarse plastering sand, well dried before the chickens are put in, and feed with cakes made by mixing good Indian breadmeal sifted, with skimmed milk, and baked hard in thin sheets. I pounded the cake in a mortar and mixed the yolks of two eggs with it without wetting, after boiling the yolks quite hard. About a pint of the pounded cake and the two egg yolks a day for two days; 1 1-2 pint and 4 yolks the 3d day; the same the 4th day; 1 quart of the pounded cake and 6 yolks the 5th and 6th days; the 7th day I began giving boiled meat, and some wheat screenings, wheat, cracked corn, etc.; the dry 3 or 4 times a day, and the pounded cakes 2 or 3 times a day, till they are a month old; never giving any soft feed until separated the crowsers and pullets at about 6 weeks, putting them in separate runs, 25 to 50 in a run.

I bought cheap boxes, 2 1-2 ft. high, 2 ft. wide, and 4 ft. long, knocked off one side of each and one end, setting the open sides together, and the open ends the same way; then made fence lengths, 2 1-2 feet high by nailing laths cut in two on to 16 feet boards, 6 inches wide, putting the laths 1 in. apart, so small chickens couldn't get inside; set

one of these lengths front of the outside of each box and laid another over the top; tacked the sides to posts drove into the ground and hung a door at the end opposite the boxes. Made a roof of matched boards that set over the boxes, and I had cheap runs that could be easily moved to clean, or for any other purpose; could scatter in dry earth, charcoal, feed or any thing wished.

Watered with earthen fountains, using two quart ones to run, set near the door, filled them in the morning, rinsed out the drinking saucer at noon, and emptied them at night. I cut holes in the top of the boxes (covering with loose boards) so that I could get at my chickens on a small spot of ground.

The bed of which I speak was a cold frame, protected on the north and east by a tight, high board fence, and made a frame large enough for 3 common hot-bed sashes, pretty slanting—say 30 inches on the back and 15 inches on the front—placing the frame on the south side of the fence; we raise the ground inside 3 or 4 inches by putting in sand and gravel; then put on two covers made of good 7-8 pine boards, planed and matched at each end, and a hot-bed sash in the middle, and I have a bed where can grow 50 chickens 6 or 8 weeks with but little trouble, which will bring, if brown leghorns and hatched in March and April, 50c to 75c a lb. for broilers, and the crowsers will dress 2 lbs. each on an average. It takes but little arithmetic to count the profit on 50 chickens. Mine last year brought \$1.25 apiece on an average, and did not hatch any to sell till April 27th:—

50 chickens, \$1.25.....	\$62 50
1 bushel screenings.....	\$1 00
2 dozen eggs.....	80
1 bushel meal.....	1 00
60 quarts skimmed milk.....	1 50
1-2 bushel onions.....	1 50
5 bushel small potatoes.....	2 00
100 lbs. cabbage.....	3 00
1 bushel crack corn.....	50
6 dozen eggs set.....	2 40
Feed of hens.....	1 00
	<hr/> \$14 70
Profit.....	\$47 80

The manure, no doubt, a good deal more than paid the care and expense of beds, etc. Some will say I was very lucky. In reply I say, I do not believe in luck at all. If laying hens are properly fed and cared for, having green feed, meat, and a variety of grains daily with pure fresh water, sand, oyster-shells ground or pounded, pulverized bone, coal ashes or dry earth in wallowing tubs, and plenty of light and ventilation constantly, 6 to 10 hens that have moulted with a crower not less than 5 months old, or more than two years (I like young ones best, and thorough-bred), a dry room 6 by 18 or 20 feet, kept clean and free from smell of ammonia any and everybody can hatch as many eggs as I can, and by following the above directions with their chickens, using due care in ventilating, feeding meat, etc., in hot weather keeping their beds, boxes and runs clean and plenty of gravel or sand always by them, any person of steady habits and a sound mind can raise nine-tenths of all the chickens they hatch, at as good a profit as I can.

The bulk of grain fed, is cracked corn,—like yellow western or southern best. I riddle it, mixing the finer part with 1-3 of its bulk. Shorts, or

fine part of screenings, and scalded with the broth I boil my meat in, for a morning feed for laying hens fed warm, and all they will eat. I feed about 2 ozs. meat a day to full grown fowls, all in the morning in cold weather, twice a day in warm. About 2 o'clock p. m., I feed the coarse part of cracked corn dry, and occasionally whole corn, wheat, screenings, oats, rye, buckwheat, etc. I feed green feed every day, raw potatoes, turnips, mangolds, onions, etc., pounded pretty fine. Onions are one of the most desirable vegetables for fowls and chickens I know. I feed some cabbage, but is usually high in the vicinity of large towns,—is worth as much per lb. as corn to feed. I feed fowl 3 times daily in warm weather, and see that they have fresh water every time.

Below please find a condensed account with 28 fowls the past year. I sold 3 crows for \$175 that went to the recent Boston exhibition; these are the only fancy prices in this account. Account with 15 brown leghorns, 7 Worcester Co., and 6 mixed hens for sitting, ending Jan. 16th, 1873, from Jan. 16th, 1872, one year:—

22 Brown Leghorn and Worcester Co. fowls at \$5.00.....	\$110 00
6 mixed hens at \$1.25.....	7 50
100 bushels grain.....	100 00
2000 lbs meat at 1¼c a lb.....	30 00
3000 lbs vegetables at 1c.....	30 00
Care, at 30c a day.....	109 50
House rent and incidentals.....	30 00
	\$417 00
CR.....	
407½ dozen eggs at 40c.....	\$163 00
Eggs sold to hatch.....	27 50
Chickens sold for poultry.....	98 78
“ “ to breed from.....	262 00
100 B. L. hens in yards.....	500 00
18 crows at \$5.....	90 00
5 Worcester Co. crows.....	25 00
20 “ “ hens.....	100 00
33 mixed hens for sitting at \$1 25.....	41 25
2 tons manure at \$60.....	120 00
	\$1427 53

This account is all from daily figures, except the manure, and I have no doubt that is estimated a good deal too low. I am constantly putting into my room leaves, leaf-mould, plaster, charcoal dust, fine-ground oystershells, hard wood sawdust, etc., etc., same as for making manure with other stock, and a person unacquainted with the care of 200 to 600 hens, where they are kept pretty close, can hardly imagine the amount of valuable manure that can thus be made from them. I ‘honestly believe’ that to grow strawberries, or early vegetables, the manure from 500 fowls properly saved, would pay their keep, their room rent and care.

F. J. KINNEY.

Worcester, Mass., Feb. 17th, 1873.

Boston Cultivator.

WILLIAM PARRY, of New Jersey, who devotes about 100 acres of his farm to small fruits, is said to prefer the following varieties of strawberries mentioned in the order of their ripening. The New-Jersey Scarlet French, Wilson's Albany, Seth Boyden, Charles Downing, Monarch of the West, Dr. Warder, Black Defiance, Col. Cheney, Late Prolific, Kissena, and Kentucky. His shipments during the height of the past season reached nearly 2500 quarts daily.

GRAPE CULTURE.

MANURE FOR THE GRAPE.

The following, taken from a work on Manuring the Vineyard, is good advice. We are of the opinion that the application of a compost thus made, will benefit a Vineyard, however rich or poor the soil may be:

“It is neither desirable nor necessary to impart to the vine too much luxuriousness. As a general thing, not enough importance is attached to a rational method of manuring, often required to assist the growth of the vine, though an excessive system of manuring will delay the ripening of the grapes, and impair the quality and quantity of wine produced.

“It is very important that the manure used should not only furnish to the vine nourishment, but also impart to it warmth. Further, no manure should be used which assists the growth of the wood, but which does not promote the yield of the wine.

“Fresh animal manure is not suitable for vineyards, as it contains too much nitrogenous ‘nourishment of excessive richness. It is therefore advisable to mix with it masses of ground, for the purpose of properly dividing the manure. Good ground is mixed with animal manure, horn shavings, ashes, bones, sawdust, dry leaves, muck, etc., in heaps, which must be moistened frequently with water, etc., and frequently stirred or mixed together.”

PLASTER OF PARIS FOR VINES.

A correspondent of *The Garden* says he had a large quantity of grape vines planted in the open ground, and trained on poles and wires along the gravel walks.

He says: “In planting these, I had the holes dug about twenty-five inches deep; I then threw into each hole five or six lumps of old plaster, about the size of my fist; I threw a little earth over the lumps, and then planted the vines in the usual way. The result has been wonderful; the vines, which were not half an inch thick when planted three years ago, are now two inches and more in diameter, and bear finely. The grapes are also freer from disease. Other vines, not so treated, are much smaller and produce less, the fruit being also more liable to disease. To try the effect of this plaster, in planting two American black walnuts, we put the plaster to the one and not to the other. The former grew twice as fast as the other. Last year we dug about the roots of the one to which no plaster was put, and we threw in seven or eight large lumps of plaster among the roots; the trees are now both of the same size, and though only four years old, are sixteen to seventeen feet high.”

LADIES DEPARTMENT.

OCTOBER.

BY GEO. W. ELLIOTT.

We do not now recall a more perfect autumnal picture than the following. It is clearly drawn, with every tint and tone in keeping with the scene.

The twittering swallows whirl in rapid flight,
Then backward turn, to linger o'er the scene
Endeared through all the glad some summer-time
In council ere they wing to Southern climes.
A leaden gray o'er all the sky is cast,
And gathering mists bedim the morning sun.
Across the fields the cow-boy's homeward feet
A green trail leave upon the frosty grass.
The golden crops of grain have all been shorn,
And pumpkins gleam among the shocks of corn.
Rich ripened apples bend the orchard boughs
Or lie in fragrant piles beneath the trees.
Hard by the farm-house, groans the cider press,
While amber currents fill the vat below.
No tints of emerald green upon the lawn
In early Spring, which faultless Nature paints
With brush of sunbeams dipped in morning dew,
Nor yet the hues of fast succeeding flowers
That spangle o'er the meadow's newest dress,
Are lovelier than the rich and changing dyes
That beautify the early autumn leaves.
The maple soft, upon its tender top,
And by degrees adown its graceful form,
Reveals a light but deepening crimson tinge,
Out-rivalled only by the modest blush
That comes and goes upon a maiden's cheek
When first she hears the earnest vow of love.
The flaming ivy, twining round the elm,
An emblem seems of ruined purity,
Which, in its deep despair still closely clings
About the saddened witness of its woe.
The sturdy oak in robe of purple stands,
An earnest mourner in a time of grief—
Himself the wasting victim of decay.
The hickory seems with golden apples hung,
Fit emblem s' here of mortals' brightest hopes,
That soon, like Dead Sea fruit, to ashes turn.
Each golden-rod a funeral taper burns
To light the melancholy scene of death.
The hardy hemlock and the towering pine
Alone retain their Spring-time grace and form,
And stand unchanged in the surrounding gloom,
Like noble principles and lofty aims
Amid the ephemeral follies of the world.

CHAT WITH THE LADIES FOR OCTOBER.

BY PATUXENT PLANTER.

"October comes, a woodman old,
Fenced with tough leather from the cold;
Round swings sturdy axe, and lo!
A fir-branch falls at every blow."

"The trees cast down their fruitage, and the blithe
And busy squirrel hoards his winter store;
While man enjoys the breeze that sweeps along
The bright blue sky above him, and that bends
Magnificently all the forests' pride,
Or that whisper through the evergreens and asks
What is there saddening in the autumn leaves?"

Well! Ladies, what have you to do now to prove
ye to be good house-wives? You have enjoyed the
flowers and fruits and vegetables peculiar to Sum-
mer, and *all*, I hope, mainly through your own in-
dustry, care and attention; or you have had your
Summer tour or other recreative pleasures; what
next for your taste, talent and industrious little
fingers to be employed in? Why did not some half-
a-dozen of you write me what to talk about, so I
might be prepared to be agreeable in this month's
chat? As you seem to take so little interest in my

talk, I shall, like *Paul Pry*, hoping "I don't intrude,"
proceed to give you my notions as to what you
should now turn your attention.

This is the great month for making *Grape Wine*.

This is the month for putting up winter butter.

Secure the flower seeds as they ripen.

Prepare your butter, hams, pickles, preserves,
needle-work, vegetables, fruits, poultry, etc., etc.,
with which you are to compete at our grand State
Fair at Pimlico, on the *seventh* day of October, where
every matron and maid in our good old State should
make an exertion to be present, to receive the hom-
age of her gallant sons of rural toil—the representa-
tives of true nobility, among whom are to be found
the best of faithful husbands and incorruptible pa-
triot. Be sure, ladies, to grace Pimlico this year,
for you will enjoy a treat, on which you will survive
in pleasant recollections during the coming winter
in the country, while your town cousins bask in the
health-destroying sounds of day and night fashiona-
ble revelry.

There is another matter I would call your atten-
tion. If you wish to have a splendid flower display
next Spring, remember *now* is the time to select your
bulbs from reliable flower-dealers, to be planted this
month. Prepare a bed or beds and borders, of any
shape or size you may fancy, and plant in it or them
*Hyacinths, Tulips, Crocus, John Quills, Daffodils, Nar-
cissus, Snow-drop*. The last named should be planted
thick to form a border or ribbon along the edges of
the beds or borders, or among the *Hyacinths* and
Tulips, as they or some of them appear before their
more exalted friends. One or two beds should be de-
voted to the more stately plants such as the *Lilies*
of all the hard sorts, *Pæonies, Iris, Fleur de Lis, Crown
Imperials*, etc., etc., etc. The dimensions of
these beds should be dug out fifteen inches deep and
all the earth taken away, the bottom then dug deep
enough to secure good drainage, well pulverized, and
the space filled with the following compost: one-
third pure sand, one-third rich wood's earth, one-
third well beaten up cow manure or the scrapings of
cow-yard,—all well mixed and incorporated by
proper manipulation. The bed should be filled two
inches above the path, a week or ten days before
planting, so that when it settled it will be about on
a level with the walk. Around the bed to guard
against moles and ground mice, puncheons or thick
slabs be driven eighteen inches deep, and project
three or four inches evenly above ground, or a lining
of brick topped off with large conch shells, which are
cheap and easily obtainable, last for years, and are
splendid borders for small beds in a country flower
garden. Let the bed be evenly raked before plant-
ing. The ornamental way to plant for effect is one
recommended by Mr. Breck in his instructive and
beautiful work on flowers, to which I am indebted
for much here suggested, it is as follows:

R B W R B W R B W
W R B W R B W R B
R B W R B W R B W

"The letters R B W denote the color of the flower
to be planted, viz: red, blue and white; under which
heads all *Hyacinths* are classed, the yellow being
classed as white. The bulbs should be planted eight
inches apart each way, and be covered four inches
deep. First place about one inch of sand where the
bulb is to stand, then press the bulb into the soil

nearly its whole thickness and cover it completely with fine sand. Having completed the planting the whole is to be covered with sound, fresh earth, sand and well rotted turf sods four inches deep. Before winter sets in cover with leaves or straw a few inches thick." A slight well worth the seeing will be the result of this little outlay of time, thought and labor, without all which, nothing in this life can be reasonably calculated upon. Have a few *Feathered* and *Grape Hyacinths* in the corners, they are very curious, looking rather rare and unique in appearance. The Grape is very peculiar, and, to my mind, is remarkable, owing to its great similitude in a certain stage of its growth to a bunch of grapes. It certainly is a beautiful Hyacinth.

Do not forget to set out a bed or beds of "*Solomon's Seal*," commonly called "*Lilly of the Valley*." Of this beautiful little flower there are three sorts: the dwarf, the most unobtrusive and certainly the prettiest, (as is generally the case in the human as well as in the plant families,) the yellow and white growing two feet high, and the giant or multa flora growing five feet. *Gerarde*, speaking of this much admired plant, says, "The roots are good for to seale up or close up greene wounds, being stampd and laid thereon, whereupon it was called '*SIGILUM SOLOMONI*,' for the virtue it has in sealing or healing wounds, broken bones, and such like." Again he says, "The roots of Solomon's Seale, stampd and bruised while it is fresh and greene, and applied, taketh away in one night, or two at most, any bruise, blacke or blew spots, gotten by falls, or women's wilfulness in stumbling upon their hasty husband's fists, or sich like." To this, Mr. Breck, in his very admirable *Book of Flowers*, wittily and siliy adds: "A very useful plant, one would think, in some families to cultivate." In our region, I would think, our wives are too cautious, and our men too gallant, to create the necessity for its culture for any such healing properties, but it is a beautiful adornment for the unclouded brow and the happy bosom of any fair matron or maid. It is the type of innocence and sweetness: for the late Chief Justice Chase and Mrs. Wirt, wife of the celebrated Wm. Wirt of Md., when together composing that sweetest of all lover's books, the *Flora's* Dictionary, declared,

"No flower amid the garden fairer grows
Than the sweet lily of the lowly vale;
The queen of flowers."

MRS. STEPHENS' NEW SOCIETY NOVEL.—*Bellehood and Bondage*, is the taking title of Mrs. Ann S. Stephens' New Society Novel, to be published in a few days by T. B. Peterson & Brothers, Philadelphia, Pa. No one is better adapted to give us a correct picture of Society that this well-known and popular writer, and we predict for it a generous reception. "*Bellehood and Bondage*" will be issued in a large duodecimo volume, uniform with Mrs. Ann S. Stephens' twenty other works, and will be for sale at all the Bookstores at the low price of \$1.75 in cloth, or \$1.50 in paper cover; or copies will be sent by mail, to any place, post-paid, by the Publishers, on receipt of the price of the work in a letter to them. The new novels, just published by this well-known house, *The Heiress in the Family*, by Mrs. Daniel; *Miss or Mrs.?* by Wilkie Collins; *The Gipsy's Warning*, by Miss Dupuy; *The Heiress of Sweetwater*, by J. T. Randolph; *Margaret Maitland*, by Mrs. Oliphant; *The Artist's Love*, by Mrs. E. D. E. N. Southworth, etc., are especially good, and are having large sales, and should be read by all.

Domestic Recipes.

DRIED HERBS.—Dried herbs are necessities with good house-keepers. Some are good for cooking, some are medicinal in their properties, &c. The practice of sending for the Doctor every time one feels a little bad, catches a bad cold, or overworks, is very bad. Hot infusion of herbs of the proper kind, and a good sweat after it, would save many a spell of sickness, if taken instead of the drugs of the Doctor, or worse still, some patent nostrum. Herbs should be dried by spreading them thinly on trays and exposing them to the heat of the sun, or better still, in a dry warm oven, observing in the latter case to turn them often. The quicker they are dried the better, as they retain their original properties better. The tops and leaves are the parts to be used, and all decayed parts to be thrown away, and free them from dirt before they are dried. Paper sacks are very good to keep them in after drying.

Aromatic herbs should be dried very quickly to preserve their odor.—*Germantown Telegraph*.

TOMATO PICKLES.—One peck of green tomatoes sliced, one dozen onions sliced, sprinkle with salt; let them stand until next day; drain them, then use the following spices: One box of mustard, one and a half oz. black pepper, ounce of whole cloves, ounce of yellow mustard seed, ounce of allspice; put in the kettle a layer of tomatoes and spice alternately, cover them with vinegar; wet the mustard before putting in, then let the whole boil fifteen or twenty minutes.

HOP YEAST.—One and a half pounds of grated raw potato, one quart of boiling water, in which a handful of hops have been boiled, one tea-cup of white sugar (coffee sugar), one-half tea-cup of salt; when almost cold put a little good yeast to start it, say about a half a pint. One pint of this yeast makes four good sized loaves of the most delightful bread you ever ate.

KEEPING HONEY.—A wholesale honey dealer says honey will not candy if a teaspoonful of cream tartar dissolved in water be mixed with a gallon of honey when scalding hot. Care must be taken not to scorch the honey.

KEEPING POTATOES.—The *Prairie Farmer* says that a good method of keeping potatoes for family use, is to pack them in barrels with sun dried sand, covering the tops with turf and keeping them in a dry and cool atmosphere. Then they will neither shrivel or shrink, to any real extent.

COLD CATSUP.—Take one-half peck tomatoes, peeled, cut fine; one tea-cup white mustard seed; one tea-cup celery seed; twenty-four nasturtium seed; one tea-cup salt; one tea-cup ground pepper; one-half gallon vinegar. Ready for use in one hour. Some add six pods red peppers.

TO PRESERVE CLOTHES PINS.—They should be boiled a few moments and quickly dried, once or twice a month, when they become more flexible and durable. Clothes lines will last longer and keep in better order for wash-day service, if occasionally treated in the same way.

SMOOTH LIPS.—We can recommend the following means for keeping lips smooth: Get a lemon, and having cut it into two parts, rub therewith the lips frequently daily, and more particularly before exposure to the open air.

LAWN EMBELLISHMENT.

In a previous paper I recorded the death of a holly, which we found at some distance from the house and transplanted to the lawn; all our care was insufficient to keep it alive. Since then one of the neighbors brought over two fine holly trees, which we set out only to die. Has any one of your horticultural, or rather arboricultural, readers been more successful in transplanting and raising the holly? If so, I should like to hear the mode of proceeding through your columns. As many of your readers are no doubt building on new ground or improving the old sites, I will commend a few hardy, vigorous, beautiful and rapid growing trees to their consideration. We set out a few honey locusts a few years ago on the south side of our house, and their rapid growth and large shade at present are as astonishing as delightful, and then who knows among things of perfume a more delightful fragrance than the snowy clustered blooms of the honey locust? Although but a few years set out they are now quite large trees, and we begin already to enjoy their grateful shade. The paper mulberry is another rapidly growing tree, and its large leaves form a fine protection when summer heats are oppressive within doors. This tree was planted quite recently, but it has established its reputation as a favorite already among our things of beauty. Have your readers all planted out a few altheas? At this present writing, in the midst of one of our annual afflicting flower-destroying drouths, it is one of the few things we have in bloom. Permit me to strongly recommend your readers to plant out a small row or hedge of them as a thing they will not regret. If there is a fence or wall or out-house near the house they would conceal it, and make the view more expansive; for while a fence or obstruction appears to confine the view, a tree or pleasant object while limiting the view gives it additional attractiveness.

Another pretty thing to have on account of its fragrance and its peculiarity, is a small patch of balm where it will not be in the way, say in the herb garden; after the formation of the flower a stalk rises from the flower two or three inches high, which bears another flower; this plant goes in this section by the name of bergamot, and our neighbors say the perfume used in hairdressing by city artists is made from it, but I am inclined to think this is a mistake—subject to the decision of the man that chats—as the oil of bergamot is obtained from the rind of a citron—citrus bergamia—and this citron is highly valued also for its taste and fragrance.

F. F.

LOUISVILLE PRICE CURRENT AND COMMERCIAL RECORD.—This weekly is devoted to Agriculture, Commerce, Manufactures and the Tobacco Trade. Its Finance and Trade reports of the week, the Review of the Markets, Prices Current, &c., are full and comprehensive, and valuable to those interested in that market. Clarke, Bro. & Co., proprietors, Louisville, Ky—weekly, per annum \$2.

AMERICAN STOCK JOURNAL.—This valuable monthly, devoted to Farming, Stock-breeding, Dairying, Poultry-breeding, &c., has changed proprietorship, N. P. Boyer & Co. having sold all their interest to other parties, and will be published in the future by the *American Stock Journal Company*, under which title it is now conducted. The *Journal* has been enlarged to forty-eight pages, and its contents monthly will well repay every subscriber for the small outlay annually—only \$1.50. Write for specimen and premium lists for 1874.

PUBLICATIONS RECEIVED.

FIFTY YEARS IN A MARYLAND KITCHEN. By Mrs. B. C. Howard. Published by Turnbull Brothers, Baltimore.

We owe our acknowledgments to the publishers for a copy of this work, one of the most valuable of its class. What the famed Virginian housekeeper, Mrs. Randolph, did for the young ladies going to housekeeping, fifty years ago, Mrs. Howard has done for the present generation. Her name and notability as one of the most honored matrons of Maryland, give assurance of the value of the book, as she asserts she has tried, with few exceptions, in her own family the recipes, and can herself recommend them.

The style is unpretending, yet strong, clear, and so plain in the formulas for the preparations of the various dishes, that a child, who can read, must comprehend them. In the modest preface, she gives as a reason why she gave her name, that her friends deemed it a *duty*, as "it has been produced solely for the purpose of aiding certain benevolent undertakings." This will be another strong inducement for every lady of Maryland and elsewhere to procure a copy. We strongly recommend this book to our young housekeepers, many of whom will often find it a "God-send;" and in such moments of doubt and perplexity as often occur to the inexperienced young wife, she will thank in her heart the venerable and benevolent authoress.

RULES AND REGULATIONS AND PREMIUM LIST OF THE SECOND ANNUAL FAIR OF THE PIEDMONT AGRICULTURAL SOCIETY, to be held at Culpeper, Virginia, on the 14th 15th, 16th and 17th of October, 1873. The first exhibition of this flourishing Institution gave indication of continued progress, and, from present indications, the present show will be much superior to the last, in everything that contributes to the success of such Associations.

CATALOGUES RECEIVED.

From Ellwanger & Barry, Mount Hope Nurseries, Rochester, New York, their Descriptive Catalogue of Fruits. No. 1—Descriptive Catalogue of Ornamental Trees, Shrubs, Roses, Flowering Plants, &c., No. 2—Descriptive Catalogue of Plants, (arranged in ten classes) No. 3—Wholesale Catalogue for Autumn, 1873. No. 4—Descriptive and Illustrated Catalogue of Bulbous Flower Roots, &c.

From A. Bryant, Jr., Nurseries, Princeton, Illinois, retail Price List and Catalogue of Fruit and Ornamental Trees, Grape, &c.

From Jos. M. Wade, Philadelphia, Pa., Price List of Fowls and Pigeons, Eggs for hatching, &c.

From Atwood, Root & Co., Geneva, New York, Catalogue and Price List of Fruits, &c.

From American Photo Lithographic Co., New York, two beautiful engravings—Before the Proposal. After the Proposal.

From Smith & Powell, Syracuse, New York, Descriptive Catalogues, Ornamental and Fruit Departments.

From Calkins & Brooks, Brickburg, New Jersey, wholesale Price List of the Brickburg Nurseries, for the Fall of 1873.

From Pee Dee Agricultural and Mechanical Fair Association—Premium List for the Second Annual Fair to be held at Cheraw, South Carolina, on 15, 16, and 17th of October.

From C. C. Langdon & Co., near Mobile, Ala., Descriptive Catalogue of Langdon Nurseries.

From Storrs, Harrison & Co., Painesville, Ohio, Illustrated Catalogue of new and Fall Plants, and Catalogue of Fruits and Ornamental Trees, Shrubs, Roses, &c.

INDIGESTION is the cause of more than half the diseases of horses, and we should be careful to feed properly and regularly, and especially to avoid putting the horses to hard work on a full stomach.

USEFUL RECIPES.

MANGE IN SWINE.—Mange, like the scab in sheep, is a cutaneous eruption, arising from the presence of minute insects called *acari*, and occasioned, in the majority of cases, by inattention to cleanliness. It appears in the form of blotchy sores, on different parts of the body, and is accompanied by a dreadful state of itchiness. The best local application is the sulphur ointment, consisting of sublimed sulphur, three ounces, and prepared lard, eight ounces. If this should not be sufficiently powerful, a drachm of the common mercurial ointment may be added to every ounce of the former. Internally, from two to four drachms of the alterative powder should be given daily.

BONE SPAVIN.—Two tablespoons of melted lard, one of cantharides, made fine; a lump of corrosive sublimate as big as a pea, all melted together and applied to the callous once a day till used up. This quantity for one leg. It will make a sore and weaken the joint while applied, but be not alarmed. Another remedy is to take six ounces oil origanum, two ounces camphor, two ounces mercurial ointment, mix well together, and rub the place affected two or three times a day.

FOOT-ROT IN SHEEP.—Foot-rot in sheep is generally caused by keeping them in low or marshy ground in warm weather. Remedy.—The foot-rot must be carefully examined, and every portion of horn that has separated from the parts beneath, thoroughly removed, and the sore lightly touched with the butyr (chloride) of antimony, applied by means of tow or cotton rolled round a flat bit of stick, and then dipped into the caustic. Remove the sheep to high ground.—*American Stock Journal*.

GRUB IN SHEEP.—Dr. Martin Sackett, of Westfield, gives the following recipe for curing grub in the head of sheep: One tablespoonful of butter, melted and mixed with a teaspoonful of spirits of turpentine. Turn this into the sheep's ears once a day for one, two or three days, as the case may require. He says it never fails.—*New England Homestead*.

SCRATCHES.—The best application for scratches, after thoroughly cleansing with castile soap, either a solution of carbolic acid, 20 parts of acid to 1 part of water, or carbolic ointment made of one ounce of acid to two tablespoonfuls of lard, and rubbed in.

TO REMOVE WARTS.—The only reliable treatment for warts is to carefully cut them out with the knife. Remove the wart and its root, and that is the last of it. Caustics and all external applications are too slow and uncertain.

THE CHECK-REIN.

We received from *F. B. May, Esq.*, Secretary of the *Massachusetts Society for the Prevention of Cruelty to Animals*, a pamphlet written by George T. Angell, the President of that Society. It is full of facts and good reasoning to prove the impropriety and real cruelty of the check-rein to harness horses, especially to those engaged in heavy hauling and general work on the farm. It seems to us that the check-rein is positive cruelty, and certainly a hindrance to the exercise of the full powers of the animal. It has been abandoned almost everywhere except in our country. It were well if every farmer could read this little pamphlet. It is offered free to all who wish it. Address the Secretary, 46 Washington street, Boston.

SCIENTIFIC.

MR. ARNOLD, of Paris, Canada, subjected the female flowers of the Indian-corn plant to the action of pollen from male flowers of different kinds of corn plants, and each grain of the ear produced showed the effect of both kinds of pollen. This shows that not only is there an immediate influence on the seed and on the whole fruit-structure by the application of strange pollen, but also that one ovule can be affected by the pollen of two distinct parents, even after some time has elapsed between the first and second impregnations.

PROF. MCKEDZIE, of the Michigan Agricultural College, analyzed the air in the college green-house, containing some six thousand plants, immediately before sunrise, and found that instead of there being an excess of carbonic acid, there was actually less than in the air outside. Hence, contrary to the general belief, a few plants in a room would not exhale enough carbonic acid to injure the sleepers.

HEAT OF THE MOON.—The Earl of Rosse advances the opinion that the earth not only receives heat from the moon by reflection, but also by radiation of the heat by which the moon is warmed. He estimates from numerous delicate experiments that the heat thus reflected and radiated is one eighty-thousandth of that obtained from the sun.

CARBON FILTERS.—Muller concludes that carbon filters cannot remove vegetable germs from water, although they can separate mechanical impurities, as sand, etc. He found that, in stagnant water, after passing through a carbon filter, the vegetable scum reappeared in a few days, though after boiling the water remained clear.

MUSCULAR FORCE OF INSECTS.—M. l'Abbe Plessis, in an article in *Les Mondes* on the above subject, says that, by way of an experiment, he placed a large horned beetle, weighing some fifty grains, on a smooth plank; and then in a light box, adjusted on the carapace of the insect, added weights up to 22 pounds. In spite of the comparatively enormous burden, being 315 times its own weight, the beetle managed to lift it and move it along. A man of ordinary muscular power is fully a hundred times feebler in proportion; and had an elephant such comparative strength, it could run away with the Obelisk of Luxor, a load of 5,000,000 pounds. Similarly, the flea, scarcely $\frac{1}{10}$ of an inch in height, manages to leap without difficulty over a barrier fully 500 times its own altitude. For a man six feet is an unusually high leap; imagine his jumping 3,000 feet in the air, over three-fifths of a mile!

HOW DOES THE COLOR OF FLOWERS VARY?—An amateur, M. Hughe, had some primroses which he transplanted into a better soil, and the result was that from yellow the flowers became an intense purple. By a similar modification, and by mingling with the soil certain substances, one may vary the color of plants. Charcoal deepens the tints of dahlias, hyacinths and petunias; carbonate reddens hyacinths; and the phosphate of soda changes in various ways the hues of some plants. It is known that a heathery soil makes the green hydrangea red.

PREPARING BONES FOR FERTILIZERS.

It frequently happens in country places where bones are quite plentiful (and where are they not?) that there are no mills to grind them, and if applied to the land as they are they decompose so slowly as to be of comparatively little use. In such cases, chemical means, which are always at hand, are to be brought into requisition.

Of all the various means that can be employed for decomposing and dissolving bones, the best and most practicable is wood ashes. They are generally plentiful in country places, they prevent any unpleasant odor from being given off, and, above all, cause a rapid and complete decomposition. The bones are converted into a fine powder, which mixed with the ashes, furnishes an excellent fertilizer, very rich in potash and phosphoric acid. The method of using them is as follows: A trench three or four feet deep, and of any desired length, is dug in the earth, and filled with alternate layers of ashes and whole bones, each layer being about six inches thick. The lowest as well as the top layers are of ashes, and each layer of ashes is thoroughly saturated with water. At distances of three feet poles are rammed down to the bottom of the ditch, and every eight or ten days they are taken out and enough water poured in the holes to saturate the ashes. At the end of two months the whole heap is thoroughly stirred up with a fork so as to mix the ashes and softened the bones, which are then left to ferment again, water being added as often as necessary. In about three months more, the heap being worked over twice or three times more, the decomposition of the bones will be so complete that only a few of the largest bones remain, and these are taken out and put in another heap.

This method of using bones comes to us from Russia and is very highly recommended. The action of the fertilizer upon crops is said to be something extraordinary. It seems as if the salts in the bones and those in the ashes unite to form very soluble salts which can be at once assimilated by the roots of plants.

Where wood ashes are scarce, recourse must be had to horse manure. The bones are soaked a few days in water and then placed in rectangular pits with alternate layers of horse manure, each layer being drenched with the water in which the bones were soaked. The strata of bones are three inches thick, and those of manure a foot thick. The pit is covered with earth so as to be tightly closed.—The decomposition of the bones will require, in this case, about ten months, when the mixture is ready for use as a fertilizer.

SAMPLE COPIES SENT.

We send sample copies of the October number of the MARYLAND FARMER to a large number of farmers in our own and adjoining States, with the hope that they may be induced to enrol their names on our lists. We are satisfied that if a careful examination of the contents of the FARMER sent be made by our friends, that they will not hesitate sending in their subscription, as we are vain enough to believe that it compares favorably with any similar publication in this country. The subscription being only \$1.50 per annum, places it in the power of every family to take it. All Clubs of 5 and upwards, only \$1 each.

Examine our list of PICTURE PREMIUMS.

RASPBERRY.—(We found to-day, Sept. 22d), on our table a small basket of large—very large—raspberries, presented by Mr. F. Whitman, which he received from a friend in the country. They have no name, but look like the old Philadelphia raspberry. The leaves are large, the bunches very large and it is in flower and fruit all the year until frost. It may be a new variety of great value. We have never seen the like. The gentleman who owns the plants is not a plant seller, but would dispose of some at fair prices. It certainly is uncommon to find in September a fruit as delicious as the early Summer Raspberry in great perfection on our tables with ice cream. It is a great luxury at such a period of the year.

STATE FAIRS FOR 1873.

American Institute, New York.....	Sept. 10, Nov. —
Carolinas, Charlotte, N. C.....	Nov. 25, 28
Cotton States, Augusta, Ga.....	Oct. 21, 24
Georgia, Macon.....	Oct. 27, 35
Indiana, Indianapolis.....	Sept. 10, Oct. 12
Maryland, Baltimore.....	Oct. 7, 16
Maryland Institute Exposition.....	Oct. 1, 31
Mississippi, Jackson.....	Oct. 13, 20
New Hampshire, Manchester.....	Sept. 30, Oct. 5
New York, Albany.....	Sept. 24, Oct. 30
North Carolina, Raleigh.....	Oct. 13, 18
Oregon, Salem.....	Oct. 6, 11
St. Louis Association, St. Louis, Mo.....	Oct. 6, 12
Virginia, Richmond.....	Oct. 28, 9

POULTRY SHOWS.

Connecticut, Hartford.....	Nov. 18, 21
Eastern Ohio, Youngstown.....	Dec. 17, —
Maine, Portland.....	Jan. 13, 16
Massachusetts, Boston Music Hall.....	Feb. 4, 11
Michigan, Detroit.....	Dec. 17, 23
Middlesex County, New Jersey.....	Feb. 11, 13
Monmouth County, New Jersey, Freehold.....	Jan. 7, 10
New England, Worcester.....	Jan. 20, 22
New Hampshire, Manchester.....	Feb. 11, 13
Northern Ohio, Cleveland.....	Jan. 23, 29
Pennsylvania, Philadelphia.....	Dec. 5, 13
Western New York, Buffalo.....	Feb. 14, 19
Western Pennsylvania, Pittsburg.....	Jan. 14, 18
Winona County, Minnesota, Winona.....	Dec. 26, 28

TO CAPITALISTS AND OTHERS desiring to embark in business. A party in this city of extensive acquaintance and long experience in the jobbing business. Sugar, coffee, &c., desire to form a connection with a firm of means to engage in the same line in this city. An interview or correspondence may be had by addressing office MARYLAND FARMER, with particulars,

NEW ADVERTISEMENTS.

We call attention to the following new advertisements in almost every department of trade, and can say to our readers that they will find the advertisers fair dealing and reliable men, and therefore commend them to their patronage:

THE ASBESTOS NON-CONDUCTOR.—The Asbestos Felting Company, of New York, advertise in our columns their Asbestos Felting, for covering Steam-Boilers, Pipes, &c., on land or in boats; the use of which, it is estimated, saves 25 to 30 per cent of fuel. Asbestos is a species of hornblende, being composed of long, compact, fibrous masses, which, separated, are soft, silky and incombustible. It has long been known to chemistry as non-inflammable, and the expensive than hair felting, will last as long as the most positive retainer of heat in nature. It is less boilers, is a perfect non-conductor of heat or cold, contracts and expands with the iron surface, is easily repaired, and soon after application in a plastic state becomes tenaciously adhesive. It is endorsed by a large number of our manufacturers, who testify that it has given more satisfaction than any similar material ever used.

The boiler and pipes by which the Steam-Presses of *The Maryland Farmer* Office are propelled have recently been covered by the Asbestos, and has proven to be everything represented by R. C. Davidge, General Manager, 95 W. Lombard Street, Baltimore.

C. F. Kuster, Baltimore, offers his Improved Street Lamps, which has been adopted by the city of Baltimore, to be used where there are no gas-mains, and answer the purpose admirably. For Towns, Villages, Churches and Halls, they are peculiarly adapted.

B. T. Hynson & Sons, Baltimore, are prepared to execute all orders for Paper Hanging and Window Shades, Window Awnings, Mosquito and Fly Nets, either in city or country. Call on them when you visit the city.

Dufur & Co., Baltimore, manufacture Wire Railings, for Cemeteries, Balconies, &c.; Sieves, Fenders, Cages, Sand and Coal Screens, Woven Wire, &c.; also Iron Bedsteads, Chairs, Settees, &c. Our country friends in need of such articles, will call at 36 N. Howard street.

Burns & Sloan, Baltimore, offer a large stock of Building Lumber, Shingles, Ash, Oak and Walnut—Lime, Brick, Sash and Mill Work. When you visit the city, call at 132 Light Street Wharf.

J. M. Thorburn & Co., 15 John Street, New York, have a large collection of first-class Bulbs, Hyacinths, Tulips, Lilies, Narcissus, Crocus, &c. Send for catalogue.

Calkins & Brooks, Bricksburg Nurseries, Bricksburg, New Jersey, can supply the Pure Wilson Albany Strawberry Plants. Also, a general assortment of Nursery Stock. Send for Catalogues.

Richard Price & Sons, Baltimore, are stocked with all kinds of Cabinet, Building and Hardwood Lumber, in lots to suit, of best quality and at lowest market prices. Write, or call on them.

J. Howard McHenry, Pikesville, Baltimore County, Md., offers for sale the celebrated trotting stallion Mambrino-Hamiltonian. Will be shown at the Fair of the Maryland Agricultural Society, October 7th to 10th. Also, several young Jersey Bulls.

Weatherby & Sons, Baltimore, are sole agents for Chilson's Cone Furnace and Cooking Range, and dealers in Heating and Cooking Apparatus of every description. See advertisement.

S. T. C. Brown, Sykesville, Md., has for sale a superior lot of young Devons from 6 to 18 months old, bred from the noted Patterson herd. If you want Devons, "nuf sed."

Geo. S. Clogg & Son, South Calvert Street, Baltimore, do a transient and custom business as Boot Makers, and stand at the head of the profession; if you do not believe it, give them a call. The ladies will find a full line of Burt's fine shoes on hand.

Domestic Sewing Machine Co., New York, wants agents for "Domestic" Paper Fashions.

Colwell Lead Co., New York, informs the public that "pure water is a great blessing." To be obtained through tin-lined lead pipe.

D. L. Staples & Co., Allen, Michigan, offers for sale the Universal Microscope, the best low-priced Microscope ever made. It is useful. Agents wanted.

Charles L. Oudsluys, Baltimore, offers to the farmer German Potash Fertilizers, Kalnit, Muriate of Potash, &c., all of which are noted as crop growers. See advertisement.

Baltimore & Ohio Railroad, publish the running time of their various branches, which you can consult as required.

Northern Central Railway, publish a schedule of all its various routes, West, Northwest, Southeast, South, North and East.

Sanders & Stayman, 79 West Fayette street, Baltimore, agents for the celebrated Estey Organ, Steinway, Bradbury and Haines Pianos, which are the leading instruments, of which they have a large variety of styles on hand, from \$300 upwards. All lovers of music will please take notice.

John Bullock & Son, Baltimore, offer to farmers, planters and gardeners, a first-class Pure Ground Bone, manufactured at their own factory—sold at \$15 per ton.

Navassa Phosphate Company, office Baltimore and New York, advertise Phosphatic Guano, from the Island of Navassa, West Indies, are prepared to furnish Crude or Fine. See analysis of "Fine Ground Navassa Guano." &c. in advertising pages.

G. & N. Popplein, Jr., Baltimore, call attention to their Paris Green, which is being so extensively used for the destruction of the potato bug, cotton and tobacco worm. It is said to be very effectual in its work. They are also extensive Paint Manufacturers.

Tate, Muller & Co., Baltimore, offer German Potash Salts, imported direct—Muriate of Potash, Kalnit, Ground Raw Bone, Bone Ash from South America. Address them for circular.

R. Q. Taylor, Baltimore, imports and manufactures the very best Hats, Furs and Umbrellas, and is sure he can please the most fastidious taste in that line. Our friends from the country, especially the ladies, can give him a call and examine his splendid assortment. His Temple is easily found, being located immediately opposite Barnum's Hotel.

Frank J. Kinney, Worcester, Mass., breeds Brown Leghorn Fowls—600 to 1,000 on exhibition in his yards. Eggs for hatching and Fowls for sale. Also, Kinney's No. 10 New Seedling Strawberry. See advertisement.

Maltby House, C. R. Hogan, proprietor, Baltimore. This first-class hotel has recently been refitted in an elegant style, and is now prepared to entertain 350 guests, and do it satisfactorily.

J. J. Turner & Co., Baltimore, offer to the Farmers and Planters of Maryland and adjoining States, their popular and well known "Excelsior," No. 1 Peruvian Guano and Soluble Phosphate. This is a standard manure. They also offer their Ammoniated Bone Super-Phosphate.

Joshua Horner, Jr., Baltimore, is prepared to supply in any quantity, Horner's Maryland Super-Phosphate; also Bone Dust, Bone Meal, and Dissolved Bone. See advertisement.

R. W. L. Raisin & Co., Baltimore, offer to the farmers and trade the Soluble Sea Island Guano, for the analysis of which we call attention to the advertisement.

J. Q. Hewlett & Son, Baltimore, are wholesale and Commission dealers in Hides, Leather and Oil; manufacturers of Oak, Slaughter and Spanish Sole; Chestnut Oak and Black Oak Extracts for sale. This House was established 1822.

Smith, Dixon & Co., Baltimore, have constantly on hand and manufacture to order every variety of Book, News, Cap, Letter and other papers, Cards, Tags, &c.; manufacturers of Machine made Paper Bags of all sizes. This is the most extensive house in its line.

Klinckfelter, Brothers, Baltimore, manufacture all kinds of Fertilizer Bags; dealers in Cotton Bags, Ropes, Twines, &c.; Tobacco Bags a specialty.

H. J. Baker & Co., Baltimore, extensive and reliable dealers in Dye-Woods, Dye-Stuffs, Gline, Indigo, Madder, Bi-Carbonate of Soda, Vitriol; Pure Ground Bones and Chemicals for making Phosphates and Fertilizers.

ADDRESS

OF

DAWSON LAWRENCE,

Delivered at the Grand Mass Meeting and
Basket Festival of the Baltimore County
Farmers' Union, (Baltimore County
Agricultural Association,) held
near Cockeysville, Thursday,
September 11th, 1873.

Mr. President, and Ladies and Gentlemen:

It is pleasant to witness this gathering of intelligence and worth, of noble sons and fair daughters and stately matrons and fathers, upon whose heads the silver rests like a crown of honor; to see the blue arch over, and the green around us, the grand old trees, and listen to the music that nature and art send up to us: it is pleasant to witness this heart-beat of social feeling and brotherly-love, and to sit down at tables of plenty with peace for an abiding companion; but there is something behind all this, from which it all springs, which demands our grateful recognition. I allude to the spirit of our institutions and our times, our situation, the conditions around us, which render all this permissible and profitable, without the fear that the tramp of armed men may disturb our intercourse.

To appreciate this, let us go back down the march of the ages, and glance at the spirit of *their* times, that we may use the progress made for our encouragement, and as a foundation upon which to erect a superstructure, whose brightness and beauty shall outblaze the Star of the Morning.

Under the laws of Lycurgus, the Grecian law-giver, 700 years before the Christian era, the peasantry, the tillers of the ground, performed the servile drudgery of the citizens, were allowed to take no part, by vote or service, in the government of the land, could not be enfranchised nor sent out of the country, and were summarily disposed of whenever their numbers alarmed their tyrants, the Spartans, who spent their time in games, in hunting and in war.

The early plebeians of Rome, 600 years before the Christian era, although owners of landed estates, could not vote in the popular assemblies; hold office; contract marriage with the patricians; nor take any part in government affairs. And they complained, 100 years later, of their increasing poverty; the severity of the laws; their exclusion from public offices; that they received no benefits from the conquests; that their estates were neglected and plundered; that the whole burden of taxation fell upon them; that the rate of interest was exorbitant, and the patricians were enormously wealthy.

At the same period, if the Roman debtor could not pay his debt, the creditor might put him to death, or sell him as a slave. If there were more than one creditor, the Laws of the Twelve Tables permitted them to cut him to pieces and divide the body in proportion to their claims, or, (they were *merciful* in those times,) the creditor could pawn himself and his little family, until he could work out the debt.

Five hundred years later, one form of amusement among the Roman people consisted of combats between men, trained for the purpose, and beasts wild and savage from their native lairs. During the reign of the Emperor Caligula, none of the regular combatants were present on one occasion, and senators were thrown to the beasts by his orders, and the common people were treated likewise, but first had their tongues drawn out to prevent their cries from disturbing him.

Two hundred years later still, Elagabalus fed the thirst for blood by throwing the common people to the beasts in the circus, whilst tier after tier of the spectators, no doubt, sent up the thunders of their plaudits. That was *their* amusement. We have met to-day for *ours*: behold the contrast! Combination, *then*, among the victims of oppression, would have been speedily crushed out by the iron heel of authority; but we have changed all that. The march of the nations has been up towards the light; they that groped amid the mists and mire of the valley, have seen the red light flashing over the eastern hill-tops; and I propose, men of Maryland, that we strike such sturdy blows for justice, and our rights and privileges, as shall dispel the last cloud of the night that has hung over us, and give us the full glory of a Sun of prosperity, unobscured by the pettiness of political intrigue, the cracking of party whips, the oppression of monopoly, or the extortion of fraud.

FIRST.—*Our Situation and the Social Advantages of Co-operation.*

The farmer, in consequence of the sparse population of the rural districts, spends most of his time apart from his neighbors: his opportunities for that social intercourse which acts so powerfully as a stimulus to man's energies, are few; the conditions surrounding his early life are, from this sparseness of population and other causes, mostly unfavorable to the acquisition of information and intellectual application; his later life of continued physical toil is unaccompanied by the relaxation of mental effort, permissible under the conditions presented by the aggregation of individuals as in a city, or the ease and polish of suburban refinement.

We need facilities for intellectual culture amongst us, and wherever you plant the standard of a Farmers' Club, you establish a nucleus of intellectual effort with its educating influences; education means good government in every part; ignorance is social demoralization. Again, from a moral point of view, wherever intellectual development is an active process in a neighborhood, wherever the physical forces with which the farmer deals so largely are brought under the strong government of trained mental power, the standard of excellence thus set up has a direct bearing upon the moral feelings of the community; for, wherever we find the intellectual forces of a community concentrated upon one point in harmonious action, we witness constant victories in the cause of moral advancement. Who doubts that if we could bring more intellectual energy to bear upon society, we should see less dissipation and wrong? In gratifying a natural desire for amusement, the young man, in most rural districts, seeks it in a bar-room, the only place of recreation open for his reception; but with a well-lighted, well-warmed and well-supplied club-room, such as the cities have, containing the innocent means of enjoyment he finds in other places, but in connection with immorality, the influence of error over him would be broken: and what a gathering place for the young—and the old, too—of both sexes! How strong would be the friendships cemented by such interesting and virtuous associations!

The Farmers' Club should be an edifice dedicated to Social Culture, open at all times, and containing within its walls everything to incite to mental and moral exertion, to physical recreation and rational enjoyment. "But that'll cost a good deal," I hear some one remark: my friends, there is nothing so expensive in a community as vice; take the money which the absence of these institutions costs you, and you can build marble palaces for your sessions. Fathers, give us your assistance in this matter, for the uplifting of your class and your family: Mothers, lend your hand to the work, that your sons may grow up peers of the best and become a *power* in the land.

Maidens, now sweethearts, with the tremendous responsibilities of the future all before you, we make an appeal for your aid, for your sake, in the prosecution of the work before us; what can you do for us do you ask? If the young ladies throughout the land would do what they could for these agencies for social improvement, so far as their exertions extended man would place his triumphant foot on the top round of the ladder of his existence in the cupola of empires, and his brow would be wreathed with the garlands and the stars of a glorious career,

Young men—how my tongue falters in my appeal to you: I would, if but for a moment, my tongue could be touched by a coal from the burning altars of Perfection; I would, if but for a moment, one flash of the splendors of the Imperia! Land might fall upon you as a foretaste of the abundance of the reward; I would, if but for a moment, one harp-note from those that well up forever from celestial choirs, might greet your ear to bind you to our cause. Look around you! Saw ye ever in halls of revelry or dissipation anything to equal the grandeur of this scene? Reason, sitting on her throne of beauty; Conscience, unimpeded in its play of Power; Truth, swaying its mild sceptre over the dominion of Intellect; Art, making nature still more beautiful; and Peace, with us as a guest that abideth.

Unite your energies with ours, elevate yourself, your families and friends and companions, those delicate vines that twine around the strong oak of your manhood; how proudly they will look up to your banner engraved with an unfailing and unfaltering "excelsior." Here, you can make your lives sublime, and in dying leave behind you footprints graven on the rocks of time. My friends, persistent labor in this good work will never be regretted; every weed of prejudice, or ignorance, or error removed, will be transformed into a blossoming amaranth, in the final retrospect of the vista of the past, whose thousand perfumes shall mingle with the harmony that will break from the green vistas of the prospect beyond, when the long summer day of youth shall have faded into the shadows at the close of our pilgrimage.

SECOND.—Inducements to Agricultural Organization and Co-operation, exist in the combinations of the world around, if not against us. Other callings have united their forces and by combined action and money and votes, have secured a strong hold of the whip under which the farmer is smarting: the hatters combine and tell him how much he must pay for a hat; the shoemakers combine and tell him how much he must pay for his shoes; the printers combine and tell him how much he must pay for his books, etc., to the end of the chapter by limiting the number of apprentices and hours of labor, by restricting the employment of female labor and other proceedings, their transactions amount to a special high protective tariff in their favor from which the farmer must necessarily suffer and to meet which he is now instituting counter combination.

Now, the principle of free trade, that is, the uninterrupted operation of the laws of demand and supply is best for all parties; all leagues to obstruct those laws are conspiracies, and some individuals

must suffer thereby: combinations—corporations, monopolies, organizations—usually effect such obstructions and operate unjustly where there are no counter combinations to resist their aggressions: where there *are* counter combinations, a peaceful settlement by arbitration offers a just solution: if shoemakers and hatters combine to regulate the prices of boots and hats, farmers should combine to regulate the prices of produce, for produce is just as much an article of manufacture by the farmer as boots and hats, and if the farmer stands alone unprotected, he not only has nothing whatever to say concerning what he shall *buy* at, but must sell his produce at other's prices, having no voice as to what it shall bring, whether he is selling at a loss or at a profit, and at the same time enters into disastrous competition with others of his own vocation.

THIRD.—*The Evils of our Situation.*

First—we permit two or three profits on some of our produce, through middlemen, when by a Grand Co-operative Distributing Establishment, we could reach the retail trade direct and divide its profits as shareholders. From this establishment also we could secure all our supplies and save the large margin of the dealers.

Second—we pay the lawyers too much money to settle our difficulties. I do not desire to say any thing unjustly disparaging of the brilliant profession of the law, or any other pursuit.

Upon the prosperity of other callings depends our prosperity. Look back across the record and you will find it as true as strange, that an exclusively agricultural country never yet achieved the best result in mind, or body, or morals; but, speaking under responsibilities as a farmer to farming men, I desire to present our cause in the strongest as well as most truthful light, and I affirm that, if the matter depended upon my vote, not another shingle should be taken from the roof of the farmer to cover the lawyer's house.

Let me show you how they are managing this matter in the cities: There the merchants have organized into Boards of Trade, the members of which settle their disputes among themselves; business judges for business men; that is a good rule—

Farmer judges for farming men; wouldn't that be a good rule too?

But the cumbersome machinery of the law would not be so objectionable if it was an agent to secure justice; said a judge, in rendering judgment against a poor widow who had made a demand for her rights: "I regret that the law compels me to enter judgment against the just claim of the plaintiff but I have no discretion in the premises!"

Can it be that the law-makers are taxing us to support iniquity?

Brother farmers, let us alter all this and institute such a state of things that "every man for injury to his person or property shall have justice and right, fully, without denial, speedily, without delay, and freely, without sale.

Third—about the politicians: I mean those who make it a profession, and constitute a class who use immoral means—intoxicating liquor among them—to secure position; control legislation by combination; secure high salaries; which come out of your pockets; stick with tenacity every time you attempt to dislodge them; know no law in or out of office; regard no right; revere no privilege—except the back-grab privilege—and respect no true social excellence when it conflicts with their plans of plunder. As enemies of every movement inaugurated in society for its advancement, I trust the time is near at hand when the political life will be stamped out of these leeches of the community, and farmers placed in public position as the incorruptible exponents of the feelings and opinions of farming men. Don't wait for the politicians to give you justice; before all parties and party obligations comes the solemn obligation of our manhood, to elect men who *dare to do right*.

FOURTH—about the railroads: I regard them as monuments of excellence; as streams to make smooth and fertile our rough and desolate places; I believe, when a man (or a number of them as a corporation) risks his money in a new enterprise, which, if successful, will be a source of profit and pleasure to thousands and millions who risked nothing, he or they should be well paid for the investment; far better than by one in which there is no risk and no glory. And in dealing with this question, it is the part of wisdom sedulously to avoid any act which would cripple a railroad corporation, or prohibit the profitable use of its highway. Far better the existing unjust condition of things than a step backward; having the power, we would regret hereafter its injudicious employment. The great evil connected with railroad management is, they have moved from their original condition, and their only proper condition as corporations, and have become monopolies. A monopoly—which means the sole privilege of doing a thing—is an obstruction to free trade, and has been in the past, and is one of the most arbitrary and dangerous violations of individual privilege. The Constitution of Maryland declares that monopolies are odious, contrary to the spirit of a free government and the principles of commerce, and ought not to be suffered.

To grant a monopoly to certain individuals to do a thing, debar all others from doing it; and as, according to the Constitution, monopolies cannot legally exist in the State, the remedy appears to be in robbing it of its sting by a rigid adoption of the principle of free-trade and competition. Build another road beside the obnoxious one. In the early stage of this controversy with the railroads, I was disposed, on account of my faith in railroads, to look upon a great deal of the outcry as unjust and unnecessary, or the statement of a difficulty which it would be almost impossible to remove; and, in discussing the question with some of your people, I was opposed to agitating the question for fear of making a bad matter worse; but, upon investigation of the subject, I am satisfied it is under the control of that great Panacea for our grievances—co-operation.

A highway is a right of passage for the public in general, and the term extends to all public ways including streets, turnpikes, railroads, canals, ferries, &c.

The right to grant a highway is vested in the legislative department of government; the power to confer a favor or grant a franchise, includes necessarily the power to affix conditions to the grant or franchise. Permission to a private corporation to do certain things—make soap or fertilizers—could not be construed to mean that such things might be done, regardless of the rights of the public; how often is a corporation indicted as a public nuisance, although it has a right to do the things for which it is indicted, but not in the *manner* to which exception is taken by the public. It could not be established that *one* corporation might defy the public, and not another; and a railroad company is a private corporation, although its functions are matters of public concern.

Again, a State has the right to authorize taxation for the building of a railway; this makes the public part owner in the matter; wherever your money is taken for any purpose whatever, you have a voice in the disposition of that money; the principle of representation on account of taxation would give you a voice in the management of a company so organized; the public are owners of a right in and to the roads and turnpikes; the fee and all rights of property, not incompatible with the public enjoyment being retained by the original owner; and this principle applies also to railroads, and in case of the abandonment of the highway, the owner recovers his original unencumbered dominion. To sum up, it is established that a railroad is created for public use, and of the mode in which it shall subserve that use, the legislature is the judge. Marshall your forces, discuss this

matter, decide it justly, and then send your own men to Annapolis to execute your mandate.

FIFTH.—*Fertilizers.*

I estimate that \$1,250,000 are annually spent in Maryland for fertilizers, of which I estimate that \$500,000 might remain in the pockets of the farmers without diminishing the quantity used; the half million being the surplus we pay for what we might do ourselves in the way of preparation and mixing. Researches have made me acquainted with instances of high handed extortion and fraud, both in quantity and quality. Dispense with dealers altogether, and purchase the crude materials, according to a good formula. Mine has raised 30 bushels of wheat per acre, saves \$20 upon each ton, and gives a large degree of security in the quality of the materials, which I count a large item in the matter in view of the great risk and the large expenditure in time, labor and money outside of the cost of fertilizers. So far as legislation is concerned to reach the evils of this traffic, it appears to me a law compelling manufacturers, dealers and agents to give bonds to the State officer for the proper discharge of their duty, with co-operation and discretion upon the part of purchasers, would make extortion and fraud of rare occurrence.

SIXTH.—*Sheep Husbandry, and Depredations by Dogs.*

Without mentioning the numerous instances of damages which dogs have committed, or the numerous protests which intelligent agriculturists have sent up against them, I think it is a universal desire upon the part of farmers to secure efficient legislation upon this subject. Your humble servant had a petition embodying the views of the enlightened agricultural sentiment of Maryland on the question, laid on the desk of every member of the last Legislature; but not only was no action taken, but they went to work and repealed existing statutes, and I came to the conclusion that my influence with the honorable body had been exerted on the wrong side of the question.

I regard sheep husbandry—minus these outrages—as one great step towards the solution of the pecuniary difficulties of our situation.

SEVENTH.—*Stock on the Highway.*

The fee of a highway, and the rights of property not interfering with travel remaining with the original owner, it is just as much a violation of principle for a man to turn his stock into your cornfield, as it is to turn them into your road; the damage might be greater, but the wrong, not.

Every blade of grass, every weed belongs to the owner of the fee. A proper law upon this subject

would enable us to set out trees along the highway to protect the traveller with their grateful shade, grade the banks and otherwise embellish them, which cannot now be done on account of the destructiveness of the cattle which pasture upon them. I could never fairly understand the antipathy of prowling cattle to young trees designed to shade the highway.

EIGHTH.—*Public Roads.*

Good roads are foundation stones in the edifice of our success as farmers; I consider any argument upon the necessity and the refining influences of good roads unnecessary; but I will say that the system adopted by the recent State Road Convention is, in my judgment, calculated to secure the end in view. The time at our disposal will not permit a discussion of its features now; it takes no money from the farmer's pocket for jobbery, removes all high salaried officers, and opens the way for the establishment of hard roads throughout the year; and I hope co-operation among farmers will be strong enough to secure its passage or something better, at the next session of the State Legislature.

NINTH.—*Immigration.*

We need, also, a good State Immigration Policy; we have an almost stationary rural population, a large cultivated surface, and a small producing capacity. If the tide of immigration could be turned to Maryland, it would induce, by settlement and occupation, the cultivation of a contracted area, and would enable us to apply to the diminished land the forces necessary to bring it to its greatest producing capacity. With a large increase of settlers, the labor question, really our greatest difficulty, would be in a fair way for adjustment. For the present, the erection of comfortable houses, and the setting apart of an acre or two to each tenant, offers one solution of the difficulty; for on this amount of land he could find profitable employment for himself when his services were not supplying a local demand.

TENTH.—We need a State Board of Agriculture, consisting of a representative from each county, to exercise advisory influence over the farmers' interests. With its chemist to analyze, and report upon manufactured fertilizers and other goods; its active secretary to travel over the State as an apostle of agricultural organization and regeneration, we might expect great things for the farmer; and one-twentieth of the money unnecessarily spent in fertilizers, would defray its expenses.

ELEVENTH.—*Temperance.*

It appears to me that the evils of intemperance so harassing and so expensive to farmers should be

abolished, and I believe they can be by proper co-operation upon the part of those injured by them. The object we should endeavor to accomplish—and I know I shall differ with many good friends of the cause—is the removal of the evils which accompany the manufacture and sale of intoxicating liquors and not the abolition of such manufacture and sale. Local Option might act as a partial remedy within restricted limits, but it presents a feature of coercion, whose employment is objectionable and yet I believe in a rigorous execution of the doctrine of self and society preservation. I think we have a right to make the seller responsible for his disposition of the article. I think we have a right to prevent an individual from squandering his substance and throwing wife and little ones upon the sympathy and the purses of industry. I think we have a right to prevent a public exhibition of excess, but I think we have no right to say what an individual shall eat or drink, or wear, provided he does those things within the limits of good citizenship; but these little rum mills that are stuck up on the cross roads and by-places, to grind peace and good order out of the community, ought not to exist. It has been remarked that it is not to the interest of the ruling class to abridge the sale of liquors nor to shut up the infamous places—those cancers of the community—which dispense them in doses proportioned to the pocket book of the most impoverished—because they are their bases of action, the fulcrums for their levers of degradation to work upon; then I submit that those who make use of such means to secure position exhibit their moral if not intellectual disqualification for such position, for I believe the immense enginery of a political campaign should be in alliance with those forces engaged in society for its elevation and purification, and not with those which degrade and destroy it. What can we reasonably expect in office from those who act thus to secure it? What have we received? Brother farmer, let us arm ourselves with the unalterable determination hereafter to make no league with vice, no compromise with fraud! Up, up with the beautiful snow white banner of the Truth for its own sake, and a victory thereunder whose fruits shall be imperishable, or a glorious defeat that shall be worthy of archangels, knowing that Truth, crushed to earth, shall rise again; knowing that efforts for the right, like the teeth of Cadmus shall not decay, but spring up armed men refreshed for combat and sure of victory.

TWELFTH AND LAST.—The cost of Insurance, life, accident and fire, now sent away, might by a county company be retained in the county, every cent of it, beyond necessary expenses, and in con-

nection with a Savings Bank, would be a source of revenue instead of an item of outlay.

In this connection permit me to urge the necessity, for our sake, of giving to the press devoted to our interests a cordial and liberal support: Farmers sometimes think they cannot afford to take the agricultural papers, but no farmer in Maryland can afford to dispense with the scientific exposition of practical farming presented by the agricultural press of his own State.

We will briefly glance at the political work of organization, in other sections. In Wisconsin, it has gone so far that farmers have called a State convention to nominate a State Farmers ticket; Kansas and Illinois have held their State Farmers Conventions. In Illinois the farmers recently made a distinct issue on the railroad question, nominated their ticket and swept the State triumphantly.

In a town of Minnesota twenty stores have been closed, those established by farmers receiving the custom.

The Patrons of Husbandry, a secret society which admits ladies as members, as all Farmer Clubs should, organized in 1868 for the welfare of farmers, now numbers nearly 500,000 members and is rapidly increasing in numbers in nearly every section of the country. Iowa has more than a thousand societies, Illinois 300, Minnesota 100, and Michigan, Indiana, Wisconsin, Missouri, Kansas and Nebraska are filling up their ranks. Missouri has called its State Convention—and Maryland, long helpless under the heel of oppression, and hemmed in by mountains of difficulty, has eagerly bent forward a listening ear from her gloom, her sorrow and her night, to catch the sweet notes of music that well up from the ranks of the peaceful army as it marches onward; her sons are under marching orders, and I trust soon to see twenty-three divisions, one from each county in the State, take their place in its columns. I expect to see their ranks swell and thicken until the flashing banners of an innumerable multitude shall whiten hill tops and valley with their radiance. I expect to see the two hosts confront each other on the eve of conflict. On one hand, the followers of craft and bribery, the children of corruption and the disciples of fraud, backed by a vast army enriched by spoil and flushed with conquest; upon the other hand the Grand Army of Agricultural Emancipation striking for right and the peace of the Brotherhood. I expect to be with the Maryland division when the trumpets sound the onset, and charge with her serried ranks for justice; the battle will be long; but we shall close our thinned ranks around our regimental standard, and charge again and again, and again, until opposition shall be vanquished and we pitch our tents on fields of deliverance.

[We notice that the author, to whom we submitted proof sheet has stricken out all the humorous portions of his remarks and also the lighter graces of his oratory to present the matter, we presume, in as compact a form as possible for publication in pamphlet form—Eds. Md. F.]

BALTIMORE MARKETS--Sept. 24th.

Prepared for the "Maryland Farmer" by GILLMORE & ROGERS, Produce Commission Merchants, 159 W. Pratt st.

[Unless when otherwise specified the prices are wholesale.]

ASHES.—Moderate inquiry at \$8.00@8.25.

BEESEWAX.—Steady at 34@35 cts.

BUTTER.—receipts lighter, with an active market; Choice Yellow in Firkins, 20@24 cts.; do. in Tub, 23@25 cts.; Medium to Good, 15@18 cts.

COFFEE.—Receipts on the increase with a dull market, for job lots, gold, duty paid—prices range from 18 to 20 cts.; for Ordinary to Choice Rio.

COTTON.—Market steady; Ordinary, 15½@16½ cts.; Good Ordinary, 17@17½ cts.; Low Middling, 19@19½ cts.; Mid dling, 20@20½ cts.

DRYED FRUITS.—We leave out quotations as the old stocks are worked off, and no arrivals of new except of Cherries which are selling at 16@18 cts.

EGGS.—Receipts light, market active. During the warm weather shippers should send in Stevens Patent Egg Cases. Fresh in Barrels, 24@25 cts.; do. in Cases, 25@26 cts.; Fancy Brands, 27 cts. Never wash eggs as it causes them to rot very quick; never leave them in the sun as it heats them and they are spoiled by the time they get to market.

FEATHERS.—Quiet. Live Geese. Prime White, 75@80 cts.; Dark, 55@65 cts.; Common, 25@35 cts.; Chicken, dry picked 9@10 cts.; scalded, 7@8 cts.; Turkeys, 3@5 cts.

FERTILIZERS.—No change to note. We quote:
Peruvian Guano—gold.....\$68 ½ ton of 2000 lbs
Turner's Excelsior.....60 ½ ton "
Turner's Ammo. S. Phos.....50 ½ ton "
E. F. Coe's Ammo. S. Phos.....55 ½ ton "
Soluble Pacific Guano.....50 ½ ton "
Patapasco Guano.....60 ½ ton "
Flour of Bone.....60 ½ ton "
John Bullock & Sons Pure G'd Bone..45 ½ 2000 lbs.
Andrew Coe's Super-phosphate.....50 ½ ton "
Dugdale & Co's Am. Snper Phos.....50 ½ ton "
Bone Dust.....45 ½ ton "
Horner's Maryland Super Phos.....50 ½ ton "
Horner's Bone Dust.....45 ½ ton "
Dissolved Bone.....47 ½ ton "
Missouri Bone Meal.....40 ½ ton "
New Jersey Ground Bone.....40 ½ ton "
Moro Phillips' Super-Phosphate Lime 50 ½ ton "
"A A" Mexican Guano.....30 ½ ton "

"A" do. do.....30 ½ ton
Moro Phillips' Super-Phosphate.....50 ½ ton
Whann's Raw Bone Super Phos.....50 ½ ton
Plaster.....\$2.25 bbl

TOBACCO.—Market very active.

Maryland—frost.....\$3.50@5.00
" common.....6.00@7.00
" good to fine.....10.00@15.00
" ground leaves.....4.00@9.00
Virginia—common to good lugs.....6.00@8.00
" common to med. leaf.....8.00@9.50
" fair to good.....10.00@11.50
" selections.....12.00@15.00
" stems.....3.50@5.00

FLOUR.—Market very dull and weak, prices declining. Super, \$5.00@5.25; Extra, \$6.00@7.25; Western Family, \$7.50@9.50; Fancy Family, \$10.50@11.00.

GRAIN.—Wheat—Very dull in sympathy with Flour and prices lower; Southern White, \$1.60@1.90; do Red, \$1.50@1.70; a lot dry new Southern White sold at \$2.25

CORN.—Market firm; Southern White, 72@77; do. Yellow, 60@63 cts.; Western mixed, 60@63 cts. Oats—Market dull at 45@48 cts.

HAY AND STRAW.—dull and prices lower. Pennsylvania Timothy, \$16.00@20.00 per ton; Rye Straw, \$25@26.00; Oats, nominal.

MILL FEED.—Very dull and prices lower. Light Middlings, 22@25 cts.; Medium, do. 30@35 cts.; Heavy, do. 38@43 cts.

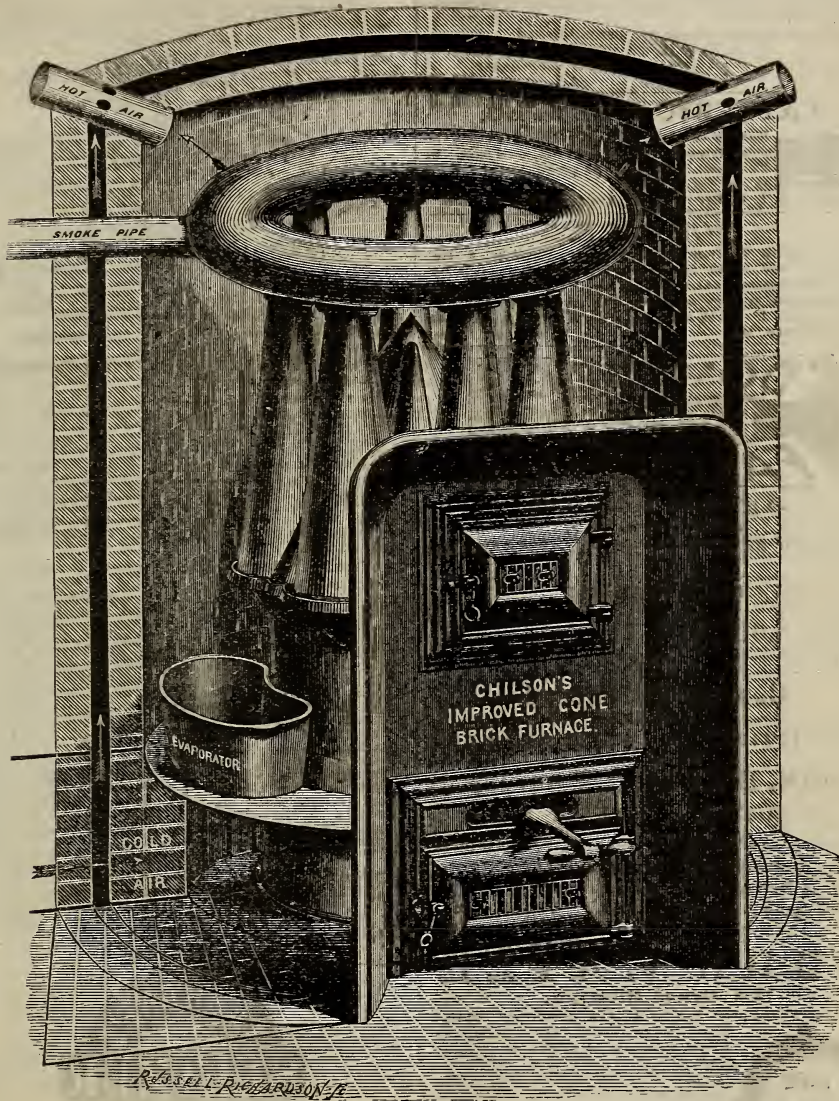
PROVISIONS.—Bacon Shoulders, 8½@9 cts.; Rib Sides, 9½@10 cts.; Clear do. 10½@10½ cts.; S.C. Hams, 16@17 cts.

RICE.—Carolina firm at 8½@9 cts.

SALT.—Dull. Fine, \$2.35@2.40; Ground Alum, \$1.30@1.35 per sack; Tuaks Island, 35@40 cts. per bus.

WHISKEY.—94@95 cts. per gallon.

CHILSON'S CONE FURNACE.



The above cut represents Chilson's Cone Furnace, which is celebrated throughout the country as the best Furnace ever introduced to the public, both as to health and economy, as a single fire will be found sufficient to warm every room in an ordinary building. It is esteemed the most complete furnace for heating halls, public buildings and private residences ever invented.

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It is no matter of surprise that this method of warming and ventilating buildings has attained such high favor, when we are made acquainted with the fact that a medium sized dwelling house, with all its apartments—eight, ten, twelve or more rooms, hall included—can be comfortably warmed by the action of one fire in furnace located in the cellar.

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Some persons will subscribe for a paper from seeing a campaign copy, got up with special care for the purpose of "taking" or through the importunities of club agents, or before reading a copy, and in most cases come out about as the boy does on his "pony." (!) It turns out to be a hog instead of a horse, and naturally rushes for its accustomed place—the swill. Be careful then to subscribe for a paper that will prove what its name indicates and every copy as good or better than the last. We, therefore, to prevent such a mistake, offer to send any and all applicants a specimen copy of the

Fruit Recorder and Cottage Gardener,
free, or three copies of different months for ten cents, or we will send the paper for next year and the balance of this year for the regular subscription price, \$1.00. The editor and proprietor, A. M. PURDY, is a life-long worker in the soil, and has now under cultivation over two hundred acres in fruit, vegetables and flowers. He also exchanges for all the leading agricultural and horticultural papers of the day, and copies into the RECORDER all practical matter of value. He can show more testimonials as to its worth in proportion to the number of its subscribers than can be produced for any other paper of its class in the country. A single specimen copy of any of its issues will satisfy all on this point. Club agents will find our terms very satisfactory, while ladies and lovers of flowers and fruits will find our premium offered extremely liberal. Send for our terms and specimen copies. Again, many people pay out \$1.50 to \$2.00 for books on growing small fruit, when they can get more practical information from our 64 page

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THE CINCINNATI EXPRESS. (via Metropolitan Branch Road) for Parkersburg, Cincinnati and Pittsburgh, will leave daily at 6:45 A. M.

THE FAST LINE via Washington and Metropolitan Branch Road, will leave daily (except Saturday) at 4 P. M.

THE ST. LOUIS EXPRESS, via Washington and Metropolitan Branch Road, will leave daily at 8 P. M.

THE MAIL TRAIN, via Main Line, for Piedmont and all Local Stations East of that point, will leave at 8 A. M. daily, except Sunday.

THE WINCHESTER AND METROPOLITAN ACCOMMODATION, via Washington and Metropolitan Branch Road, will leave daily (except Sunday) at 3:20 P. M.

THE FREDERICK ACCOMMODATION, via Main Line, will leave at 5 P. M.

ELLICOTT'S MILLS ACCOMMODATION, will leave daily (except Sunday) at 1:20 and 7:30 P. M.

FOR HAGERSTOWN.

Via Washington and Metropolitan Branch Road, at 6:45 A. M. and 4 P. M., except Saturday. On Saturdays at 6:45 A. M. and 3:20 P. M. only. No train on Sundays.

FOR WINCHESTER.

Leave at 6:45 A. M.; 3:20 and 4 P. M., via Washington and Metropolitan Branch Road, and at 8:06 A. M., by Main Line. On Saturday there will be no train at 4 P. M.

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Leave Baltimore at 9:45 A. M. except Sunday; arrive at Harrisonburg at 4 P. M., and Staunton early the same evening.

FOR FREDERICK.

Via Main Line, leave at 8:06 A. M. and 5 P. M. daily, except Sundays; via Metropolitan Branch Road at 4 P. M. except Saturday and Sundays.

FOR WASHINGTON.

Leave at 5:15, 6:45, 6:50, 7:40, 8:15, 9:15, 11:00, A. M. and 1:35, 3:20, 4:00, 4:30, 5:06, 6:40, 8:00, 11:15 P. M.

FROM WASHINGTON.

Leave at 5, 6:45, 7:50, 8:10, 8:45 and 9:45 A. M., and 12 M. and 1:20, 3:30, 4:10, 5, 6, 7:45, 8:45 and 9:15 P. M.

SUNDAY TRAINS—WASHINGTON BRANCH.

For Washington—Leave at 5:15, 6:45 and 8:15 A. M., and 1:35, 3:20, 4, 5:06, 8 and 11:15 P. M.

From Washington—Leave at 5, 7:50 and 8:10 A. M., and 1:20, 5, 6, 7:45, 8:50 and 9:15 P. M.

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POOLE & HUNT.

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GENTS—The following is the result of an analysis of your Ground Bone:

	PER CENT.
Moisture determined at 212° Fahrenheit,	5 44
Organic matter,	39 16
Containing Nitrogen, 4.47 per cent.,	
Equal to Ammonia, 5.42 per cent.	
Inorganic matter,	55 40
Containing Phosphoric Acid, 22.15 per cent.,	
Equal to Bone Phos. of Lime, 48.35 per cent.	
Alumina, Oxide of Iron, and Carbonate and Floride of Lime not determined.	
Insoluble Residue, 3.61 per cent.	

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I am pleased to state that this is one of the richest and most available forms of Phosphate of Lime and Ammonia that can be found for agricultural purposes. The percentage of valuable ingredients named is in excess of the generality of fertilizers now being offered for sale.

Respectfully, &c.,

P. B. WILSON,

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